METEOROLOGICAL OFFICE,

LONDON.

DAILY WEATHER REPORTS.

1ST JULY—31ST DECEMBER,

1889.

Sci. Regt. Lond.

DAILY WEATHER REPORT.

July to December 1889.

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DAILY WEATHER REPORT.

for Monday 1st July 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 8.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	30·06	62	Z	0	b	30·00	− ·14	67	58	0	SW	2	b	*	73	50	—
	Hernösand ...	30·04	62	SSW	2	b	29·99	− ·17	64	60	+ 2	SE	2	b	*	73	50	—
	Stockholm ...	30·06	63	Z	0	b	30·02	− ·12	70	61	+ 3	Z	0	b	*	77	54	—
	Wisby	30·07	60	ESE	2	b	30·04	− ·10	63	58	+ 3	SW	4	b	*	65	50	—
	Bodö	30·02	58	NE	2	c	29·99	− ·12	53	51	− 5	SW	2	r	1	59	48	0·24
	Christiansund...	30·07	59	WSW	2	0	30·10	+ ·04	56	53	− 4	WSW	4	f	2	66	52	0·04
	Skudesnaes ...	30·13	60	WNW	4	c	30·17	+ ·05	60	55	− 1	NNW	6	bc	4	68	54	—
	Christiania Fjord (Fiorder)	29·96	67	SSE	3	b	29·95	− ·12	64	60	− 5	N	4	b	2	70	63	—
	Skagen (The Scaw)	30·02	59	W	5	b	29·99	− ·09	61	57	− 4	W	4	b	2	68	57	—
	Fanö	30·17	60	WNW	1	bc	30·16	− ·03	63	60	− 2	WNW	4	c	*	72	57	—
BRITISH ISLANDS.	Sumburgh Head	30·07	55	WSW	2	0	30·28	+ ·24	57	50	− 5	WNW	3	0	3	62	49	0·07
	Stornoway ..	30·25	55	W	4	bc	30·37	+ ·29	55	53	0	SW	3	0	3	58	50	0·02
	Wick	30·23	52	NW	4	0	30·36	+ ·25	57	54	− 1	NW	3	op	3	63	49	0·02
	Nairn	30·24	61	W	3	c	30·38	+ ·29	57	52	− 2	W	1	b	1	64	52	—
	Aberdeen... ...	30·23	60	SE	1	bc	30·40	+ ·28	59	51	− 2	NW	2	bc	2	68	49	—
	Leith ...	30·26	65	W	3	b	30·41	+ ·25	61	54	+ 1	WNW	2	b	*	68	49	—
	Shields	30·24	65	WSW	3	c	30·41	+ ·23	61	56	− 5	N	2	c	2	65	51	—
	Spurn Head ...	30·24	64	W	5	bc	30·37	+ ·12	60	57	− 2	NNE	5	c	4	70	56	—
	York	30·28	67	W	3	b	30·42	+ ·07	60	55	− 3	WNW	3	b	*	74	53	—
	Loughborough	30·31	66	NW	3	c	30·43	+ ·13	63	57	+ 1	NW	1	b	*	76	53	—
	Arurossan ...	30·31	60	W	4	0	30·45	+ ·26	59	55	− 1	W	3	b	2	63	53	—
	Malin Head ...	30·36	56	NW	4	0	30·46	+ ·28	55	55	− 1	WSW	3	od	3	59	50	0·01
	Mullaghmore ...	30·43	57	WNW	4	cm	30·51	+ ·22	57	55	0	WSW	4	op	2	61	54	—
	Belmullet ...	30·45	57	W	2	o	30·54	+ ·20	57	54	+ 1	W	1	o	*	58	53	—
	Donaghadee ...	30·35	57	NNE	2	c	30·50	+ ·24	57	55	− 1	NNE	2	o	1	63	55	—
	Barrow-in-Furness	30·31	62	NW	5	o	30·54	+ ·29	58	54	− 2	N	3	bc	*	62	54	—
	Liverpool (Bidston)	30·36	58	WNW	3	o	30·47	+ ·18	55	52	− 3	WNW	3	o	4	64	55	—
	Holyhead ...	30·37	61	NW	1	c	30·50	+ ·20	57	54	− 2	NNE	1	b	1	66	54	—
	Parsonstown ...	30·42	65	W	1	c	30·53	+ ·22	56	53	− 2	Z	0	o	*	67	47	—
	Valencia	30·49	60	NNW	1	cm	30·54	+ ·15	60	56	0	Z	0	bm	1	64	50	—
	Roche's Point...	30·43	65	NW	3	b	30·54	+ ·18	58	54	− 3	N	1	b	2	67	53	—
	Pembroke ...	30·39	61	WNW	3	c	30·49	+ ·15	58	55	+ 1	NNE	2	b	1	61	52	—
	Scilly	30·40	60	WNW	4	o	30·46	+ ·07	62	59	+ 2	ENE	3	o	4	63	57	—
	Prawle Point ...	30·38	63	NNW	3	c	30·45	+ ·07	65	59	+ 3	NNE	2	b	1	65	51	—
	Jersey	30·41	63	WNW	3	b	30·42	+ ·01	61	57	0	NNW	4	bm	3	66	56	—
	Hurst Castle ...	30·34	67	W	4	b	30·41	+ ·06	65	60	+ 3	NNE	4	b	1	70	55	—
	Dungeness ...	30·26	65	WSW	4	bc	30·34	+ ·06	61	56	− 4	NNE	3	o	1	72	56	—
	London	30·28	69	W	1	b	30·37	+ ·07	62	56	− 3	N	2	b	*	78	55	—
	Oxford	30·32	66	N	3	c	30·42	+ ·09	60	56	0	NNW	4	b	*	73	52	—
	Cambridge ...	30·32	70	NW	1	o	30·39	+ ·09	61	56	− 4	N	1	o	*	77	52	—
	Yarmouth ...	30·27	67	SE	1	b	30·34	+ ·07	62	60	− 3	NNW	3	bc	2	69	56	—
GERMANY.	Cuxhaven ...	30·18	66	NW	2	b	30·17	− ·10	65	61	− 2	N	3	c	*	69	64	—
	Berlin	30·12	71	ENE	2	bc	30·12	− ·06	68	62	+ 4	NW	2	c	*	81	61	—
	Wiesbaden ...	*	*	*	*	*	30·22	− ·01	64	61	− 2	N	3	o	*	72	61	0·08
	Munich	30·27	68	SW	3	b	30·28	+ ·01	61	59	0	W	4	o	*	70	54	0·12
FRANCE & NETHERLANDS.	The Helder ...	30·23	63	NW	1	bc	30·27	+ ·04	63	60	− 4	NNW	2	c	3	66	61	—
	Brussels .. ... 9 am	*	*	*	*	*	30·29	+ ·03	65	60	+ 2	NE	2	bc	*	?	60	—
	Cape Gris Nez...	?	63	SW	2	bc	?	?	61	59		N	3	c	3	73	59	—
	Paris	30·29	73	NNW	2	b	30·33	+ ·01	57	56	− 5	N	2	f	*	81	53	—
	Brest	?	64	N	2	o	?	?	60	53	0	N	1	o	1	64	52	—
	Lorient	30·41	65	WNW	4	b	30·43	·00	59	57	+ 4	NNW	3	b	2	68	54	—
	Rochefort ...	30·41	66	NW	5	b	30·38	− ·07	60	58	− 2	NE	4	b	2	68	54	—
	Belfort														*			
	Lyons	30·24	69	NNW	2	bc	30·27	+ ·01	64	61	+ 2	N	1	b	*	73	59	—
	Nice...	30·06	70	SW	3	bc	30·08	+ ·04	75	62	+ 8	SW	1	b	0	77	63	—
	Perpignan ...	30·27	75	NW	4	b	30·24	− ·02	71	60	+ 2	W	4	b	*	79	67	—
	Biarritz	30·41	68	N	3	b	30·38	− ·01	66	62	+ 2	Z	0	b	1	75	61	—
PENINSULA.	Corunna ... ... ‡	*	*	*	*	*	30·28	?	70	66	− 1	NNE	1	b	2	70	57	—
	Lisbon	30·13	82	N	3	b	30·13	·00	68	63	− 3	NE	4	b	2	88	68	—

For Explanation of Columns, see p. 4.

‡ Received too late for insertion in Charts on p. 2

WEATHER CHARTS

for 8 a.m. on Mondays, 1st July. 1887.

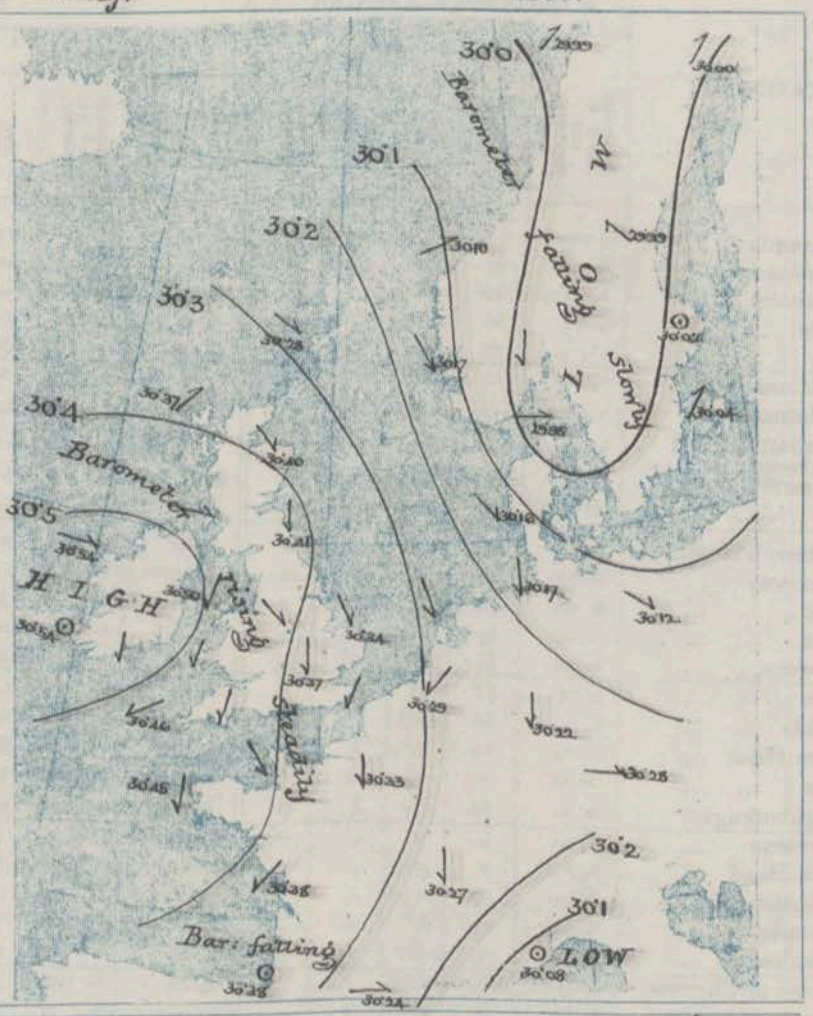
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE – Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

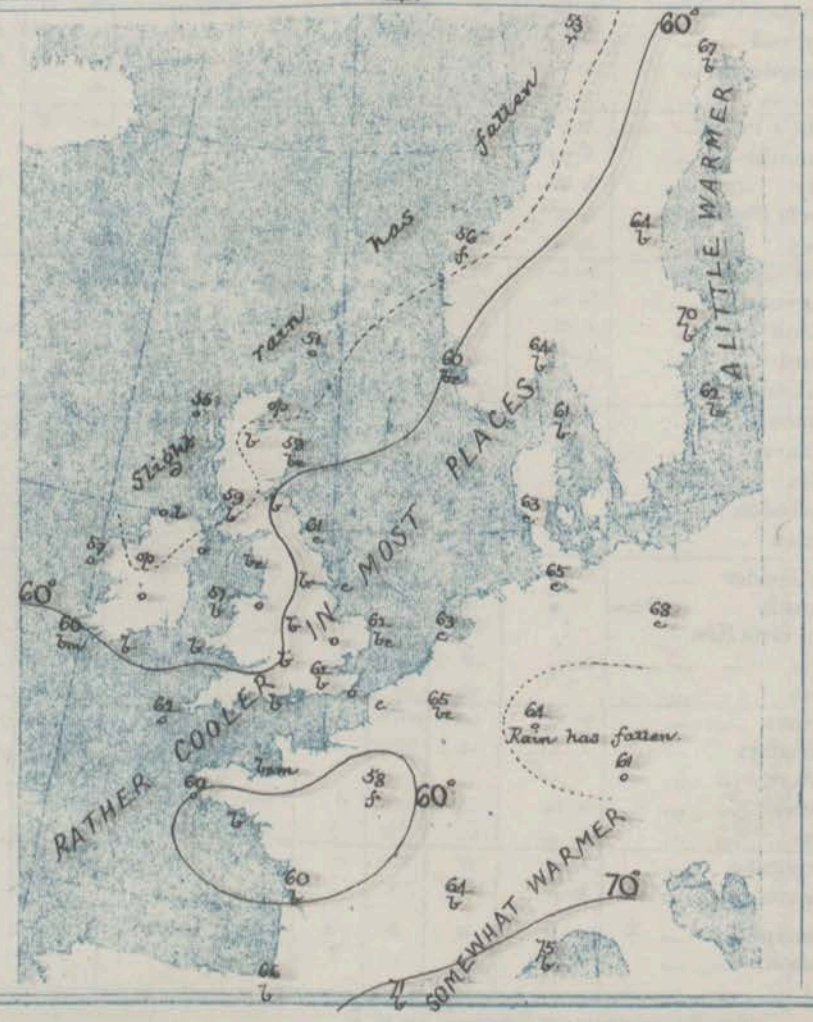
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL – A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	68 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest 30.4 ins. to 30.5 ins. in an anticyclone the eastern part of which is spreading eastwards from the Atlantic over the British Islands. Lowest 30.0 ins. and less over the inland parts of Scandinavia, 30.1 ins. and less, over the Gulf of Genoa & SE of France. Gradient very slight over our Islands and the Bay of Biscay. Barometer falling over Scandinavia, and the southwest of France, rising in our Islands.
TEMPERATURE	Highest 75° at Nice, 70° at Stockholm, 67° at Haparanda, 65° at Prawle Point, Hurst Castle and Cuxhaven, 63° at Loughborough, and 62° in London Lowest 51° at Lerwick Head, 53° at Bodö, 55° at Stornoway and Malin Head. The maxima over our Islands yesterday were all below 80°, those at Paris and Berlin were both 81°.
WIND	Light to moderate generally – N.ly over France, England and the North Sea. W.ly to SW.ly in Scotland and the north of Ireland, and the northwest of Norway. S.ly (SW to SE) over Sweden.
WEATHER	Rather showery in the northern parts of Ireland, Scotland and Norway. Fair or fine elsewhere. Slight rain has fallen at the German stations.
SEA	Moderate at some of our western stations, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

No immediate change in the weather is indicated.

FORECASTS

For the 24 hours ending at NOON on 2nd July 1887.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	W.ly and SW.ly breezes, light or moderate; some showers.	6 SCOTLAND WEST	Same as No. 0.
1 SCOTLAND EAST 2 ENGLAND N.E	NW.ly and W.ly breezes, light; fine generally.	7 ENGLAND N.W. 8 ENGLAND S.W.	N.ly breezes, moderate; fair.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	N.ly and NE.ly breezes, light or moderate; fine.	9 IRELAND NORTH	Same as No. 0.
		0 IRELAND SOUTH	Same as Nos. 7. and 8.
		WARNINGS	None Issued.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.), Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesmacs ...	30·13	65	58	WSW	4	c	3
Sunburgh Head							
Stornoway ...	30·19	57	55	W	4	c	4
Aberdeen ...							
Shields							
Ardrossan ...							
Malin Head ...	30·31	55	54	NW	5	c	4
Mullaghmore ...							
Belmullet ...	30·42	58	53	NNW	2	bc	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	30·36	62	59	WNW	2	c	2
Valencia							
Scilly							
Jersey	30·46	65	60	WNW	3	bc	3
Dungeness ...	30·28	69	61	SW	4	bc	3
London							
Yarmouth ...							
Rochefort ...	30·44	68	63	NW	4	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30·5 in. and upwards, in an anticyclone lying over the Bay of Biscay and the northwest of Spain, and high 30·2 in. and upwards over Central Finland. The lowest readings, 29·8 in. and less, were found in a large shallow area lying over Central Russia. The wind was light to moderate from the W.ds over our islands, the Netherlands and the south of Denmark, from the NW. or N. in France and Germany and from the NE. in Spain. Elsewhere, however, light variable breezes were general. The weather was fair in most parts of Europe, but dull at some of our western and northern stations as well as in South Germany, the east of France and western Algeria. Temperature had fallen a little over the southern parts of Russia and risen slightly in Spain, but elsewhere the changes were very irregular; readings ranged from between 70° and 80° at the Mediterranean stations, to a little below 60° over Russia and the northern and northwestern parts of the United Kingdom. The highest individual readings were 79° at Cagliari, 78° at Barcelona, 77° at Brindisi, 76° at Sfax, 75° at Palermo, San Fernando and Rome, and 74° at Lisbon & Lisbon; the lowest were 54° at Moscow, 55° at Kiew, Kharkov and Stornoway, 56° at Sunburgh Head, Malin Head & Belmullet and 57° at Archangel and Pembroke.

In the course of the day the anticyclone over the Bay of Biscay spread slowly northeastward and the barometer rose at all but our southeastern stations. The weather remained fine in most places and temperature rose to a maximum of 76° at Leighton, 77° at Cambridge and 78° in London.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 23rd TO THE 29th JUNE 1889.

The weather of the past week has been fair and dry in nearly all parts of our area, but thunderstorms have occurred at some of the English, French and German stations. Temperature has fluctuated a little from time to time, but the readings have been, upon the whole, considerably above the average for the season. Pressure was at first highest on a large anticyclone which extended from the far north over all the more northern parts of the United Kingdom, and the prevailing winds were therefore NE.ly. On Wednesday 26th, however, the anticyclone was replaced by a large area of low pressure and for a time variable breezes were experienced. On the 27th a shallow area of low readings moved gradually eastward over France (occasioning the thunderstorms referred to above) and in the rear of this a new anticyclone of considerable size and height spread slowly over our islands from the southwestward. W.ly breezes, veering to the NW., consequently set in generally.

At the commencement of the time the readings of the thermometer did not differ much from the average, but towards the latter part of the time temperature rose considerably and on the 27th and 28th the maximum readings were a little above 80° in many parts of Great Britain.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Tuesday 2nd July *1889*

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	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29·86	64	SW	2	c	29·97	− ·13	65	56	− 2	NW	2	b	*	72	48	—
	Hernösand ...	30·04	63	NNW	3	c	30·08	+ ·09	60	57	− 4	NNW	4	b	*	79	52	0·12
	Stockholm ...	30·01	64	SSW	2	b	30·10	+ ·08	61	55	− 9	NNE	6	o	*	77	55	—
	Wisby	30·01	61	W	2	b	30·05	+ ·01	62	60	− 1	WSW	4	b	*	68	54	—
	Bodö	29·97	58	WSW	6	r	30·14	+ ·15	50	47	− 3	W	6	c	3	57	48	0·24
	Christiansund...	30·26	54	WSW	6	f	30·35	+ ·25	58	52	− 3	W	2	f	2	59	50	0·08
	Skudesnaes ...	30·21	57	NW	4	b	30·24	+ ·07	56	52	− 4	NW	8	b	3	62	52	—
	Christiania Fjord (Fiorder)	29·97	69	WSW	3	m	30·18	+ ·23	63	54	− 1	NNE	6	b	2	75	63	—
	Skagen (The Scaw)	29·97	64	2	0	b	30·11	+ ·12	68	58	+ 4	ENE	2	c	1	75	59	—
	Fanö	30·12	59	NW	5	c	30·10	− ·06	62	58	− 1	NW	4	c	*	68	57	—
GERMANY.	Sumburgh Head	30·37	53	WNW	1	0	30·43	+ ·15	54	52	+ 3	NNW	1	b	1	56	47	—
	Stornoway ..	30·38	57	SW	2	r	30·42	+ ·05	55	55	0	SW	2	o	2	60	52	0·06
	Wick	30·41	59	N	1	0	30·47	+ ·11	59	54	+ 2	E	1	o	0	63	51	—
	Nairn	30·40	63	2	0	0	30·43	+ ·05	59	55	+ 2	2	0	c	1	65	56	0·02
	Aberdeen... ...	30·43	58	SSW	1	0	30·46	+ ·06	57	54	− 2	E	1	o	1	65	54	—
BRITISH ISLANDS.	Leith	30·40	66	WNW	2	0	30·42	+ ·02	60	55	− 1	2	0	o	*	75	55	—
	Shields	30·42	58	E	2	c	30·41	·00	58	55	− 3	E	1	c	2	64	56	—
	Spurn Head ...	30·40	59	NE	2	b	30·40	+ ·03	61	56	+ 1	N	3	bc	3	65	56	—
	York	30·42	65	ESE	1	bc	30·43	+ ·01	62	56	+ 2	ENE	1	c	*	74	56	—
	Loughborough	30·39	67	WNW	2	0	30·43	·00	60	56	− 3	ENE	1	o	*	75	56	—
	Ardrossan ...	30·44	60	2	0	0	30·43	− ·02	63	59	+ 4	W	2	b	1	65	56	—
	Malin Head ...	30·47	56	N	2	0	30·44	− ·02	58	57	+ 3	2	0	o	0	58	55	0·03
	Mullaghmore ...	30·50	59	W	3	c	30·45	− ·06	60	58	+ 3	ENE	4	bcm	2	61	56	—
	Belmullet ...	30·52	60	W	2	0	30·44	− ·10	58	57	+ 1	E	1	o	*	62	55	—
	Donaghadee ...	30·49	58	E	1	b	30·46	− ·04	58	57	+ 1	NNE	2	o	0	60	50	—
	Barrow-in-Furness	? 30·41	62	NNW	4	c	? 30·40	− ·04	60	58	+ 2	S	2	b	*	64	57	—
	Liverpool (Bidston)	30·46	60	WNW	3	b	30·42	− ·05	61	59	+ 3	WNW	2	c	3	62	56	—
	Holyhead ...	30·48	58	NW	1	b	30·44	− ·06	58	57	+ 1	ENE	1	cgm	1	61	54	—
	Parsonstown ...	30·46	72	2	0	bc	30·43	− ·10	62	59	+ 6	2	0	bc	*	72	51	—
	Valencia	30·51	64	NNW	1	b	30·41	− ·13	63	60	+ 3	2	0	bm	0	67	52	—
	Roche's Point...	30·49	64	S	1	b	30·43	− ·11	64	60	+ 6	SE	1	b	2	66	54	—
	Pembroke ...	30·43	62	NNE	4	b	30·41	− ·08	60	57	+ 2	ENE	1	c	0	64	54	—
	Scilly	30·41	60	NNE	4	b	30·35	− ·11	63	60	+ 1	ENE	3	b	2	63	56	—
	Prawle Point ...	30·40	64	NNW	2	b	30·38	− ·07	61	58	− 4	ENE	2	b	1	69	55	—
	Jersey	30·39	65	NNW	3	b	30·37	− ·05	62	56	+ 1	ENE	4	bm	3	66	57	—
	Hurst Castle ...	30·38	71	ENE	3	b	30·39	− ·02	65	61	0	ENE	2	c	1	74	60	—
	Dungeness ...	30·35	69	ENE	4	bc	30·35	+ ·01	60	53	− 1	E	5	c	3	69	50	—
	London	30·38	70	NE	2	bc	30·39	+ ·02	60	54	− 2	NE	2	bc	*	72	57	—
	Oxford	30·40	65	NE	1	0	30·42	·00	58	55	− 2	NE	3	o	*	72	57	—
	Cambridge ...	30·39	68	2	0	b	30·41	+ ·02	61	56	0	N	1	o	*	71	53	—
	Yarmouth ...	30·40	64	NNE	3	b	30·37	+ ·03	58	55	− 4	N	4	c	4	66	53	—
FRANCE & NETHERLANDS.	Cuxhaven ...	30·20	62	NW	5	c	30·16	− ·01	62	59	− 3	NW	5	bc	*	69	61	—
	Berlin	30·09	67	NW	5	0	30·12	·00	63	57	− 5	NW	4	bc	*	77	59	—
	Wiesbaden ...	*	*	*	*	*	30·23	+ ·01	62	56	− 2	NW	3	bc	*	75	57	—
	Munich	30·24	59	SW	3	0	30·19	− ·09	58	57	− 3	NW	3	o	*	72	55	0·04
	The Helder ...																	
	Brussels	*	*	*	*	*	30·31	+ ·02	60	54	− 5	NNE	2	o	*	72	55	—
	Cape Gris Nez...	?	60	NE	4	b	?	?	57	53	− 4	NE	5	o	5	68	55	—
	Paris	30·26	71	NNE	3	bc	30·30	− ·03	57	55	0	NNE	3	c	*	75	52	—
	Brest	?	62	N	3	b	?	?	59	55	− 1	E	3	b	3	70	54	—
	Lorient	30·35	65	NNE	4	b	30·29	− ·14	59	53	0	ENE	4	b	2	72	55	—
	Rochefort ...	30·30	71	N	3	c	30·24	− ·14	62	59	+ 2	NE	5	b	2	72	55	—
	Belfort	30·18	62	NW	1	c	30·15		61	58		E	2	bc	*	67	58	0·08
	Lyons	30·20	65	NNW	3	0	30·14	− ·13	62	58	− 2	NNW	3	b	*	75	59	—
	Nice...	30·08	61	NE	3	c	30·01	− ·07	72	66	− 3	2	0	bc	0	82	61	0·34
PENINSULA.	Perpignan ...	30·13	78	NW	3	b	30·10	− ·14	72	63	+ 1	W	3	b	*	81	65	—
	Biarritz	30·26	69	N	2	0	30·15	− ·23	64	61	− 2	NE	2	o	2	75	59	—
	Corunna	*	*	*	*	*												
	Lisbon.	30·02	78	W	3	b	29·97	− ·16	68	63	0	NNE	4	b	2	84	66	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Tuesday, 2nd July, 1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.

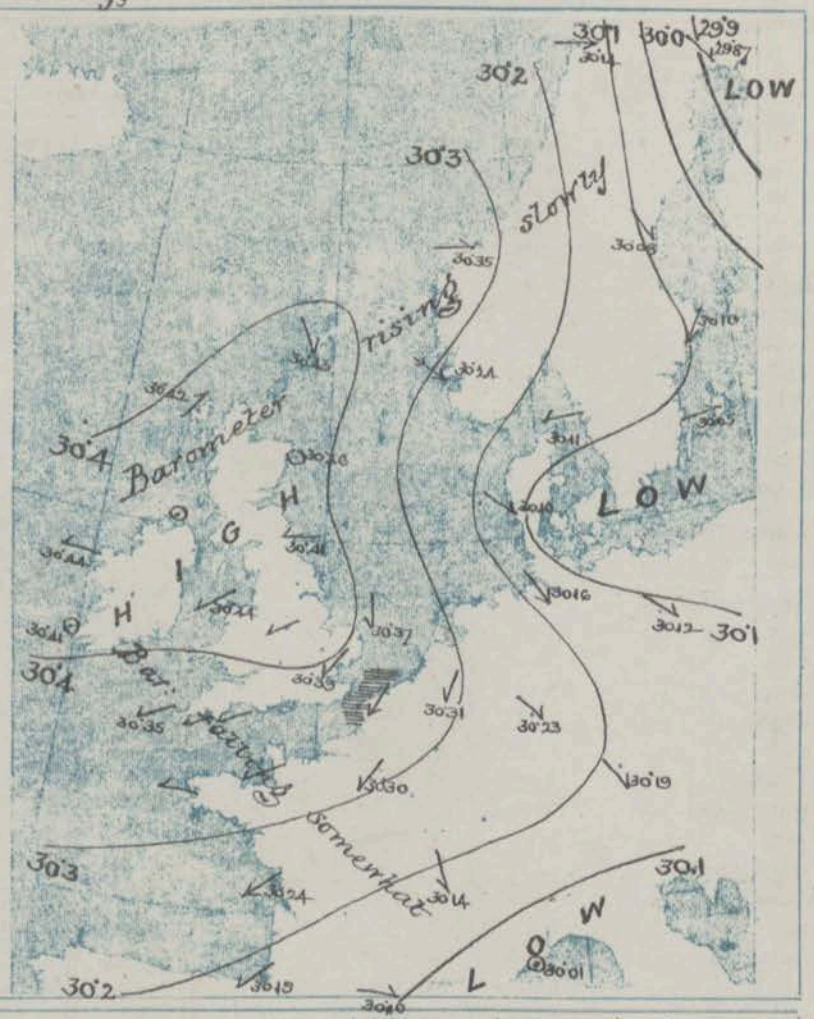
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

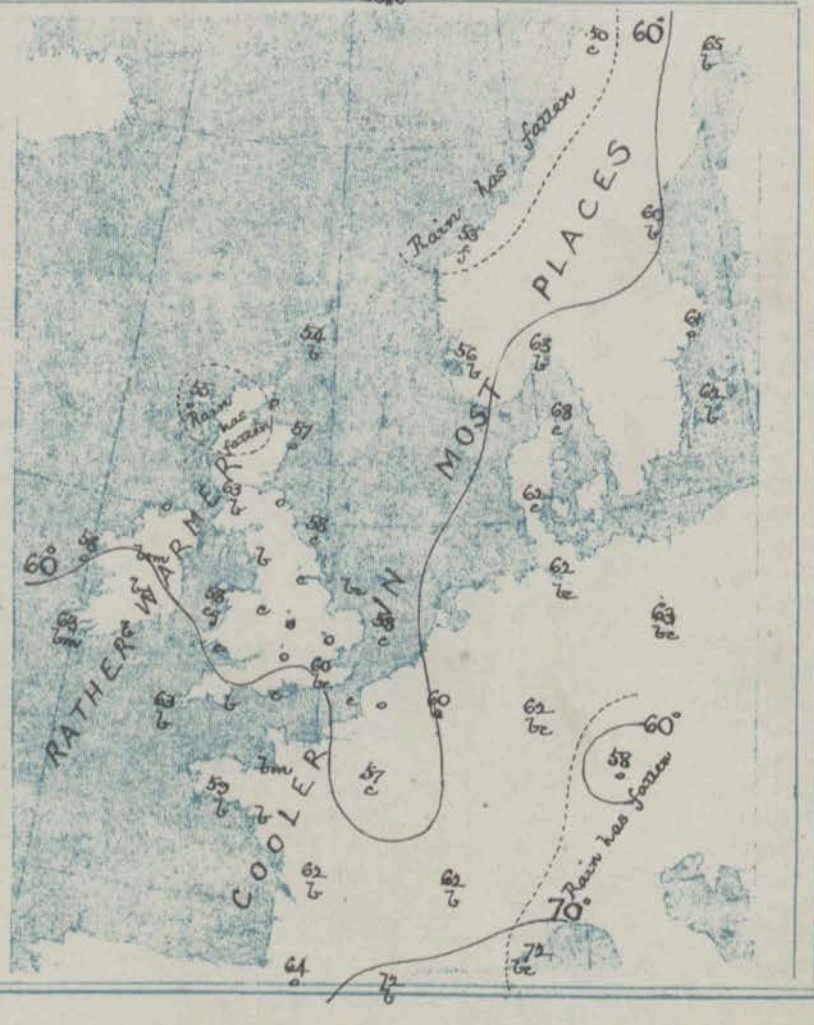
RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (*Inches.*)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.40 ins. and more, in an anticyclone covering the British Islands.
Lowest 30.10 ins. and less, over Denmark and the Sound; 30.00 ins. over the Gulf of Genoa.
Gradients very slight over our Islands, slight over France and the Bay of Biscay.
Barometer falling slowly except in the far North.

TEMPERATURE

Highest 72° at Nice and Perpignan, 68° at the Scaw, 65° at Hurst Castle, and also at Haparanda, 64° at Biarritz and Roches Point, 63° at Berlin and Valencia.
Lowest 50° at Bodö, 54° at Lerwick Head, 55° at Stornoway, 57° at Aberdeen and at Pais, 58° at Malin Hd, Belmullet & Oxford.
Daily maxima varied from 70° to 75° at our inland stations.

WIND

W.ly to NW.ly in Norway and Germany – strong at Bodö, a gale at Skudesnaes, moderate at the German stations.
Extremely light and variable over Ireland and Scotland.
N.ly to NE.ly light to moderate over England, NE.ly moderate in the Channel and Bay of Biscay.

WEATHER

Fair generally; cloudy in some places, clear in others.
Slight rain has fallen in the far North; also at Nice and Munich.

SEA

Moderate to rather rough at the southeastern stations, but is very little disturbed elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Should the changes mentioned above continue in progress a freshening of the NE.ly wind over England, and especially on our east and southeast coasts will probably be experienced.

FORECASTS

For the 24 hours ending at NOON on 3rd JULY 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	Varying light breezes; fair as a whole.	6 SCOTLAND WEST	Same as No. 0 and 1.
1 SCOTLAND EAST		7 ENGLAND N.W.	NE.ly breezes, light; fine.
2 ENGLAND N.E	NE.ly and N.ly breezes, moderate; fair, cloudy at times.	8 ENGLAND S.W.	Same as No. 2 to 5.
3 ENGLAND EAST		9 IRELAND NORTH	Varying E.ly breezes, light; fine.
4 MIDLAND COUNTIES		0 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesnaes ...	30·20	62	55	NNW	8	be	4
Sumburgh Head	30·34	55	52	WNW	3	o	3
Stornoway ...	30·38	60	59	SW	2	o	2
Aberdeen ...	30·42	58	57	S	2	o	2
Shields	30·41	64	58	E	2	b	3
Ardrossan ...	30·44	61	58	WNW	3	o	2
Malin Head ...	30·46	58	58	W	4	o	3
Mullaghmore ...	30·51	61	58	W	3	cm	2
Belmullet ...	30·52	62	58	WSW	1	o	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	30·50	60	55	N	1	b	1
Valencia	30·52	67	62	WNW	2	b	2
Scilly	30·46	63	60	NNE	3	b	4
Jersey	30·41	65	58	N	3	b	3
Dungeness ...	30·36	66	60	ENE	4	c	3
London	30·40	68	57	NNE	2	c	*
Yarmouth ...	30·38	66	62	NNE	4	b	3
Rochefort ...	30·37	69	68	NNW	4	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The Continental information will appear in to morrow's report

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Wednesday 3rd JULY 1889

Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29·98	56	N	1	c	30·09	+ ·22	54	50	− 11	NE	6	o	*	?	35	—
	Hernösand ...	30·14	59	NNW	4	bc	30·13	+ ·05	58	50	− 2	N	6	bc	*	68	55	—
	Stockholm ...	30·12	59	N	2	o	30·10	·00	59	50	− 2	N	6	b	*	70	54	—
	Wisby	30·08	60	N	4	o	30·06	+ ·01	58	54	− 4	N	6	b	*	66	52	—
	Bodö	30·16	49	W	4	o	30·25	+ ·11	52	50	− 2	Z	o	c	1	?	46	0·08
	Christiansund...	30·39	55	W	3	c	30·38	+ ·03	54	52	+ 1	WNW	1	f	1	57	50	0·08
	Skudesnaes ...	30·21	56	NNW	6	b	30·22	− ·02	63	56	+ 7	NNW	2	b	2	?	50	—
	Christiania Fjord (Færder)	30·15	41	E	2	b	30·25	+ ·07	61	51	− 2	NE	4	c	1	71	59	—
	Skagen (The Scaw)	30·14	65	N	1	b	30·19	+ ·08	63	56	− 5	E	3	o	2	73	61	—
	Fanö	30·15	63	WNW	1	b	30·18	+ ·08	68	61	+ 6	ENE	1	b	*	72	55	—
BRITISH ISLANDS.	Sumburgh Head	30·43	55	NNE	1	c	30·42	− ·01	52	52	− 2	Z	o	o	o	55	48	—
	Stornoway ..	30·40	57	NE	2	bc	30·37	− ·05	59	56	+ 4	Z	o	b	2	60	44	—
	Wick	30·46	58	Z	o	b	30·41	− ·06	58	54	− 1	S	1	b	1	66	38	—
	Nairn	30·40	61	E	2	b	30·40	− ·03	57	51	− 2	Z	o	bm	1	67	38	—
	Aberdeen... ...	30·45	55	ENE	2	b	30·41	− ·05	59	54	+ 2	N	2	b	2	60	49	—
	Leith	30·41	60	E	2	b	30·40	− ·03	55	51	− 5	E	2	o	*	66	51	—
	Shields	30·40	60	NNE	2	b	30·35	− ·06	57	53	− 1	NE	2	o	3	63	52	—
	Spurn Head ...	30·36	58	NE	4	c	30·31	− ·09	57	52	− 4	NNE	3	o	3	63	54	—
	York	30·39	64	NNE	2	b	30·35	− ·08	59	54	− 3	NNE	1	c	*	70	53	—
	Loughborough	30·35	67	NE	3	bc	30·34	− ·09	57	52	− 3	ENE	2	o	*	71	53	—
	Ardrossan ...	30·36	66	NE	2	o	30·37	− ·06	59	54	− 4	NE	2	bm	1	70	52	—
	Malin Head ...	30·37	57	ESE	3	b	30·33	− ·11	61	58	+ 3	S	3	bem	1	61	55	—
	Mullaghmore ...	30·36	66	NW	2	b	30·31	− ·14	59	57	− 1	E	5	bm	2	69	57	—
	Belmullet ...	30·37	68	NNE	1	o	30·28	− ·16	62	58	+ 4	E	2	b	*	74	58	—
	Donaghadee ...	30·40	62	NNE	2	b	30·39	− ·07	56	53	− 2	NNE	3	b	1	64	55	—
	Barrow-in-Furness	30·34	66	NW	2	o	30·34	− ·06	57	53	− 8	NE	3	bc	*	69	49	—
	Liverpool (Bidston)	30·35	62	W	1	bc	30·35	− ·07	59	50	− 4	E	2	o	4	65	51	—
	Holyhead ...	30·35	58	NNW	2	c	30·32	− ·12	61	56	+ 3	E	3	bm	2	61	54	—
	Parsonstown ...	30·35	70	Z	o	c	30·28	− ·15	61	59	− 1	Z	o	bc	*	73	52	—
	Valencia	30·32	68	NNW	1	c	30·23	− ·18	66	61	+ 3	ESE	1	bem	1	73	55	—
	Roche's Point...	30·33	63	ESE	4	b	30·25	− ·18	65	61	+ 1	E	3	b	3	67	55	—
	Pembroke ...	30·31	68	NNE	2	bc	30·30	− ·11	57	56	− 3	ESE	3	cg	2	67	57	—
	Scilly	30·28	63	NE	2	b	30·21	− ·14	60	58	− 3	ENE	5	o	4	67	56	—
	Prawle Point ...	30·30	59	ENE	2	b	30·06	− ·12	55	53	− 6	ENE	4	og	2	70	52	—
	Jersey	30·28	64	NE	5	b	30·22	− ·15	61	56	− 1	ENE	5	bem	2	67	55	—
	Hurst Castle ...	30·31	65	ENE	4	c	30·23	− ·16	57	54	− 8	NE	4	c	2	71	54	—
	Dungeness ...	30·28	60	ENE	5	bc	30·24	− ·11	57	57	− 3	ENE	5	d	3	65	55	0·01
	London	30·32	64	NE	3	c	30·25	− ·11	57	52	− 3	NE	2	og	*	67	54	—
	Oxford	30·33	60	NE	3	b	30·31	− ·11	55	52	− 3	NE	3	o	*	66	52	—
	Cambridge ...	30·32	61	N	2	bc	30·30	− ·11	59	54	− 2	NNE	1	o	*	66	53	—
	Yarmouth ...	30·33	59	N	4	c	30·28	− ·09	58	57	0	N	4	cm	4	62	55	—
GERMANY	Cuxhaven ...	30·15	65	NNW	1	b	30·18	+ ·02	68	65	+ 6	NW	1	b	*	68	64	—
	Berlin	30·11	69	NW	2	o	30·11	− ·01	63	59	0	NW	3	c	*	73	57	—
	Wiesbaden ...	*	*	*	*	*	30·18	− ·05	64	59	+ 2	NE	3	c	*	70	57	—
	Munich	30·19	57	Z	o	o	30·19	·00	58	56	0	NE	4	c	*	64	50	0·20
FRANCE & NETHERLANDS.	The Helder ...	30·23	61	NNW	2	o	30·19		64	61		NE	1	bc	1	64	59	—
	Brussels	*	*	*	*	*	30·21	− ·10	60	56	0	WNW	2	bc	*	67	54	—
	Cape Gris Nez...	?	59	NE	5	c	?	?	57	56	0	ENE	3	o	3	64	55	—
	Paris	30·21	65	NE	2	c	30·19	− ·11	59	56	+ 2	NNE	3	m	*	72	50	—
	Brest	?	67	E	4	b	?	?	58	55	− 1	E	4	b	4	72	50	—
	Lorient	30·19	64	NE	4	b	30·14	− ·15	56	53	− 3	ENE	4	b	2	70	54	—
	Rochefort ...	30·14	73	ENE	5	b	30·09	− ·15	61	58	− 1	ENE	5	b	2	82	54	—
	Belfort														*			
	Lyons	30·04	71	N	3	b	30·07	− ·07	59	55	− 3	N	2	b	*	75	54	—
	Nice...	29·98	66	ENE	5	c	29·99	− ·02	66	62	− 6	E	1	c	2	82	61	0·04
	Perpignan ...	29·99	75	SE	2	b	30·01	− ·09	71	66	− 1	Z	o	bc	*	86	60	—
	Biarritz	30·03	72	NNE	3	b	29·99	− ·06	68	64	+ 4	Z	o	b	1	77	62	—
PENINSULA.	Corunna ... ... ‡	*	*	*	*	*	29·86	− ·20	76	71	+ 5	NE	1	b	2	84	61	—
	Lisbon	29·90	75	WNW	3	bc	29·91	− ·06	64	62	− 4	S	3	o	?	81	61	—

For Explanation of Columns, see p. 4.

‡ Received too late for insertion in Charts on p. 8.

WEATHER CHARTS

for 8 a.m. on Wednesday, 3rd July. 1889.

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EXPLANATION OF MAP.

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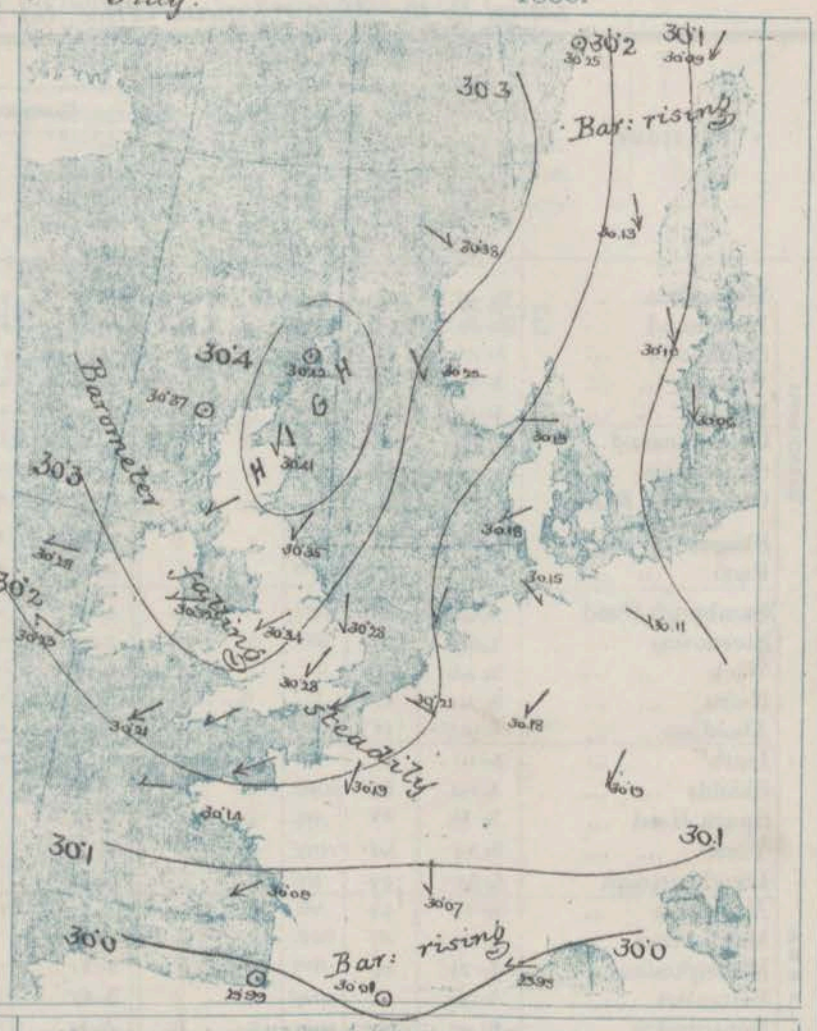
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



TEMPERATURE, & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

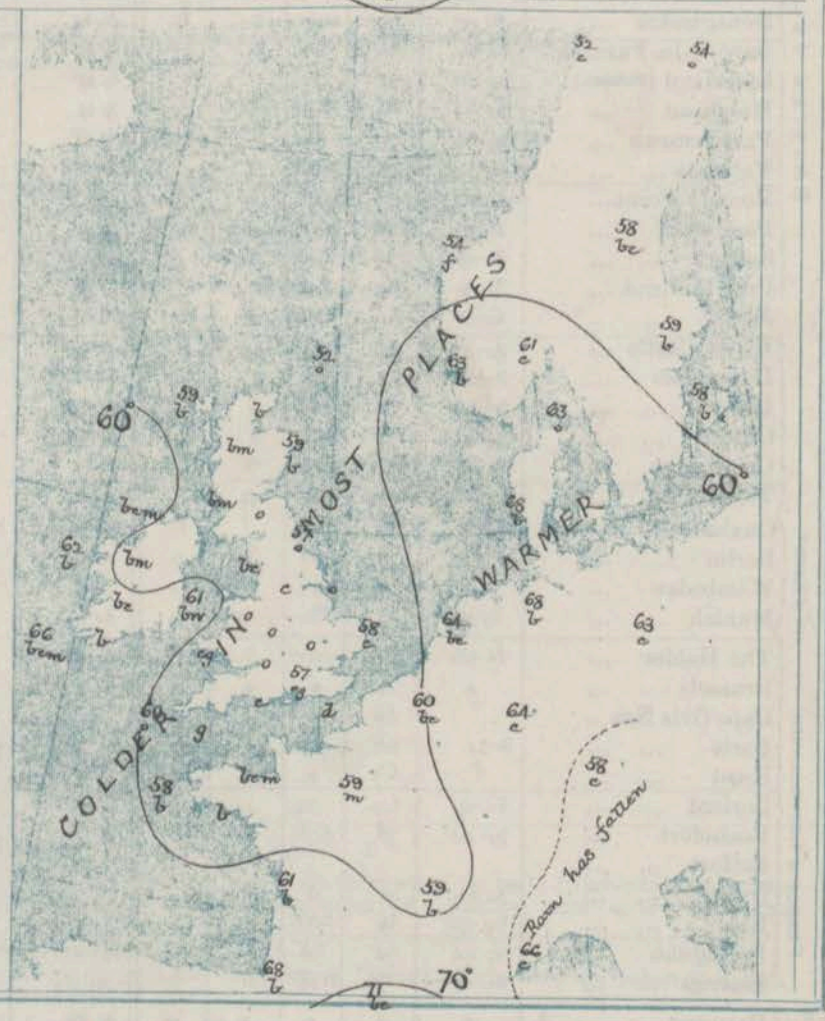
RAINFALL—A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE — Highest 30·2 ins. to 30·4 ins. over the whole of the British Islands, the North Sea, and Norway. Lowest 30·0 ins. and less, over Spain and the Mediterranean, 30·1 ins. and less over the Baltic. Gradients slight. Barometer falling slowly except over Finland and the north of Sweden.

TEMPERATURE — Highest 71 at Perpignan, 68° at Cuxhaven and Fano, 66° at Nice and Valencia, 64° at Wiesbaden, 62° at Belmullet. Lowest 52° at Lambrigh Head and Bodö, 54° at Haparanda and Christiansund, 55° at Oxford, 57° in London. Yesterday's maxima were again slightly above 70° at our Inland stations, at Paris, and in Germany, 82° at Nice, 86° at Perpignan. The minima recorded in the NE of Scotland were very low.

WIND — Strong N. in Sweden, moderate to fresh NE. in the English Channel and west of France. Light NE. on our northeast coasts — E. in Ireland and the Irish Sea. Calms and variable airs prevail in Scotland.

WEATHER — Fair and dry except at Dungeness, but cloudy at several English stations. Rain fell yesterday at Nice and Perpignan.

SEA — Moderate in the English Channel, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Some further increase in the strength of the NE wind at our southern and eastern stations appear probable, but beyond this no important change is indicated

(See Note on p. 4.)

FORECASTS

For the 24 hours ending at NOON on 4TH JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	Very light winds; fair generally.
2 ENGLAND N.E 3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	N. or NE. breezes, light to moderate; fair, cloudy at times, cool.
6 SCOTLAND WEST	Same as No. 0 and 1.
7 ENGLAND N.W. 8 ENGLAND S.W. 9 IRELAND NORTH 0 IRELAND SOUTH	E. or SE. breezes, light or moderate; fine.
WARNINGS	None Issued.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesnaes ...	30·26	60	52	NNW	8	b	3
Sumburgh Head	30·44	56	54	NNW	2	c	2
Stornoway ...	30·44	57	56	SW	3	o	3
Aberdeen ...	30·47	58	53	ENE	2	b	3
Shields	30·40	62	58	NE	2	be	2
Ardrossan ...	30·30	70	62	W	2	b	1
Malin Head ...	30·43	69	58	ESE	2	o	0
Mullaghmore ...	30·41	68	64	NNE	1	bm	2
Belmullet ...	30·41	73	64	NSW	1	be	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	30·41	57	56	N	3	fg	2
Valencia	30·35	72	66	SW	1	cm	1
Scilly	30·39	65	62	ESE	4	bm	3
Jersey	30·33	67	59	E	5	b	3
Dungeness ...	30·39	64	57	E	5	be	?4
London	30·36	64	56	NE	2	o	*
Yarmouth ...	30·36	62	57	N	3	be	4
Rochefort ...	30·19	79	70	NE	5	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

DAILY WEATHER REPORT — NOTICE.

Owing to a change of Lithographers there has been some unavoidable delay in publishing the Daily Weather Report during the past few days. It is hoped that the difficulty has now been overcome.

The Continental Information will appear in tomorrow's report.

Remarks on the Weather for the 24 hours ending 8 am on JULY 2ND.

The reports for Monday morning showed that pressure varied from between 30·40 ins. and 30·55 ins. in a high pressure area, which was spreading eastwards over the United Kingdom from the Atlantic, to less than 29·8 ins. in a low pressure system lying over Central Russia, and to less than 30·0 ins. in secondary systems, one of which lay over Scandinavia and the other over Sicily and the south of Italy. Thus the general drift of the wind over Europe was N.W. (NE to NW), and its force light to moderate. In the North of our Islands, however, and over Scandinavia and the Baltic the direction of the wind varied greatly, and in some localities its force was strong. The weather was fair generally, but cloudy in several places; rain had fallen at Nancy, Leghorn and Trieste, and at some stations over northern Europe also, but the amounts collected were small. Temperature was inclined to decrease in most places, but was high in the northeast of Spain, and on the shores of the Adriatic, and over Finland. The highest morning values were 80° at Barcelona, 79° at Brindisi, 76° at Cagliari and Lesina, 75° at C. Lice and Nice, 74° at Algiers, 73° at Trieste, 70° at Stockholm, and 69° at Haparanda; at Berlin the temperature was 68°, in London 62°, at Paris 58°, and at Moscow 57. The lowest values were 51° at Sumburgh Head, 53° at Bodö and Archangel, 55° at Stornoway and Malin Head, as well as at Kharkov, 56° at Kiev, 57° at Moscow, Holyhead and Belmullet. Later on the barometer continued to rise over the northwestern and northern parts of the British Islands and Europe, but fell elsewhere, and the wind veered to NE over England, with a further slight fall of temperature.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Thursday 4TH JULY. *1889*

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	30·25	57	NE	6	bc	30·20	+ ·11	60	50	+ 6	NE	4	b	*	61	48	—
	Hernösand ...	30·21	58	2	0	b	30·28	+ ·15	62	51	+ 4	N	6	c	*	72	52	—
	Stockholm ...	30·04	57	N	8	0	30·03	— ·07	57	51	— 2	N	6	0	*	63	52	—
	Wisby	30·02	59	N	6	c	29·90	— ·16	54	53	— 4	NE	4	0	*	63	54	0·24
	Bodö	30·36	52	NNE	2	b	30·42	+ ·17	53	50	+ 1	2	0	b	0	54	45	—
	Christiansund...	30·33	57	NE	6	b	30·32	— ·06	57	52	+ 3	NE	3	b	2	61	50	—
	Skudesnaes ...	30·13	56	NW	6	b	30·23	+ ·01	55	?	— 8	ESE	2	b	3	66	50	—
	Christiania Fjord (Farder)	30·15	68	NE	5	b	30·22	— ·03	62	53	+ 1	NNW	6	b	2	68	59	—
	Skagen (The Skaw)	30·12	63	N	1	b	30·14	— ·05	63	55	0	NNE	3	b	2	73	59	—
	Fanö	30·12	62	E	2	b	30·16	— ·02	60	57	— 2	NNW	2	b	*	77	54	—
BRITISH ISLANDS.	Sumburgh Head	30·37	54	NNE	1	m	30·32	— ·10	53	53	+ 1	NNE	2	0	2	59	50	—
	Stornoway ..	30·28	61	E	3	b	30·25	— ·12	61	58	+ 2	2	0	b	2	64	46	—
	Wick	30·34	57	SE	2	c	30·33	— ·08	55	54	— 3	SE	2	f	1	64	52	0·02
	Nairn	30·30	60	E	3	b	30·30	— ·10	55	53	— 2	2	0	cm	1	64	49	—
	Aberdeen... ...	30·34	58	ENE	3	b	30·31	— ·10	55	53	— 4	N	2	cd	2	61	52	0·01
	Leith	30·32	58	E	2	b	30·30	— ·10	56	55	+ 1	ENE	2	0	*	63	52	—
	Shields	30·28	59	N	2	c	30·25	— ·10	57	56	0	NNE	2	d	3	62	55	—
	Spurn Head ...	30·24	60	NNE	3	0	30·20	— ·11	59	56	+ 2	NNE	3	0	3	61	56	—
	York	30·27	65	ENE	1	b	30·23	— ·12	61	57	+ 2	ENE	2	0	*	71	51	—
	Loughborough	30·26	63	ENE	2	0	30·22	— ·12	58	55	+ 1	ENE	1	0	*	71	54	—
	Ardrossan ...	30·25	70	NE	3	bm	30·26	— ·11	57	55	— 2	NE	2	cm	1	72	51	—
	Malin Head ...	30·23	61	ESE	3	bm	30·22	— ·11	58	55	— 3	ESE	4	bm	2	62	55	—
	Mullaghmore ...	30·21	67	ENE	4	bm	30·20	— ·11	59	55	0	E	4	bm	2	70	55	—
	Belmullet ...	30·19	70	ESE	1	0	30·18	— ·10	61	56	— 1	E	1	b	*	73	52	—
	Donaghadee ...	30·27	58	NE	3	b	30·27	— ·12	58	55	+ 2	NE	3	m	1	62	55	—
	Barrow-in-Furness	30·23	65	NNW	2	b	30·22	— ·12	61	57	+ 4	NE	4	bc	*	67	52	—
	Liverpool (Bidston)	30·22	63	N	1	b	30·23	— ·12	59	54	+ 2	ESE	1	0	2	69	54	—
	Holyhead ...	30·23	58	NE	3	bm	30·21	— ·11	61	56	0	ENE	3	bmw	2	64	53	—
	Parsonstown ...	30·19	68	2	0	c	30·19	— ·09	56	54	— 5	2	0	bc	*	72	43	—
	Valencia	30·16	66	ESE	3	bm	30·14	— ·09	60	57	— 6	NE	1	om	1	69	50	—
	Roche's Point...	30·21	61	ESE	3	bc	30·15	— ·10	62	59	— 3	ESE	3	0	3	66	50	—
	Pembroke ...	30·21	61	ENE	2	bc	30·18	— ·12	58	56	+ 1	E	2	cg	1	61	57	—
	Scilly	30·15	60	ESE	5	b	30·09	— ·12	60	59	0	E	5	0	4	62	57	—
	Prawle Point ...	30·16	60	ENE	5	c	30·13	— ·13	58	56	+ 3	ENE	5	ogm	3	61	54	—
	Jersey	30·13	65	NE	5	b	30·08	— ·14	64	60	+ 3	ENE	5	bm	4	66	58	—
	Hurst Castle ...	30·20	63	ENE	4	om	30·16	— ·07	61	59	+ 4	ENE	4	om	3	65	57	—
	Dungeness ...	30·19	62	ENE	5	bcm	30·14	— ·10	60	58	+ 3	ENE	5	c	4	65	57	0·02
	London	30·22	62	ENE	2	0	30·17	— ·11	60	56	+ 3	NNE	1	0	*	64	56	—
	Oxford	30·22	58	NE	2	0	30·20	— ·11	56	54	+ 1	NE	3	0	*	61	53	—
	Cambridge ...	30·25	58	N	1	0	30·20	— ·10	60	56	+ 1	N	1	0	*	62	53	—
	Yarmouth ...	30·24	59	N	4	c	30·20	— ·08	57	55	— 1	N	1	c	3	61	54	—
GERMANY.	Cuxhaven ...	30·16	65	NW	2	b	30·17	— ·01	65	60	— 3	NE	3	b	*	68	62	—
	Berlin	30·07	68	N	3	0	30·04	— ·07	60	55	— 3	N	4	b	*	73	57	0·51
	Wiesbaden ...	*	*	*	*	*	30·09	— ·09	65	62	+ 1	2	0	b	*	75	57	—
	Munich	30·15	61	2	0	b	30·12	— ·07	61	58	+ 3	NW	3	c	*	66	50	—
FRANCE & NETHERLANDS.	The Helder ...	30·17	64	NNE	1	b	30·16	— ·03	61	58	— 3	N	1	0	1	70	59	—
	Brussels	*	*	*	*	*	30·13	— ·08	64	60	+ 4	NNE	1	b	*	75	57	—
	Cape Gris Nez...	?	59	ENE	5	c	?	?	59	58	+ 2	ENE	5	m	5	64	55	—
	Paris	30·10	70	NE	2	b	30·08	— ·11	63	59	+ 4	NNE	2	b	*	74	54	—
	Brest	?	68	E	4	b	?	?	61	59	+ 3	E	4	b	4	73	52	—
	Lorient	30·01	69	E	2	b	30·02	— ·12	60	57	+ 4	E	3	b	2	77	55	—
	Rochefort ...	30·03	77	ENE	4	b	29·97	— ·12	63	60	+ 2	ENE	3	b	2	88	55	—
	Belfort	30·04	62	E	2	b	30·05		59	55		E	1	b	*	68	53	—
	Lyons	30·00	72	NNE	2	b	30·04	— ·03	65	60	+ 6	ESE	1	b	*	75	57	—
	Nice...	30·00	66	2	0	c	30·04	+ ·05	69	65	+ 3	2	0	b	0	73	61	0·12
PENINSULA.	Perpignan ...	29·97	74	2	0	b	30·01	·00	69	67	— 3	NE	3	0	*	79	59	—
	Biarritz	29·89	68	NE	3	b	29·86	— ·13	70	65	+ 2	SE	2	b	0	77	68	—
	Corunna	*	*	*	*	*												
	Lisbon	29·93	64	SW	4	0	30·03	+ ·12	66	60	+ 1	W	1	0	2	73	63	—

The Explanation of Columns, see p. 4.

‡ Received too late for insertion in Charts on p. 2.

WEATHER CHARTS

for 8 a.m. on Thursday, 4th July. 1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

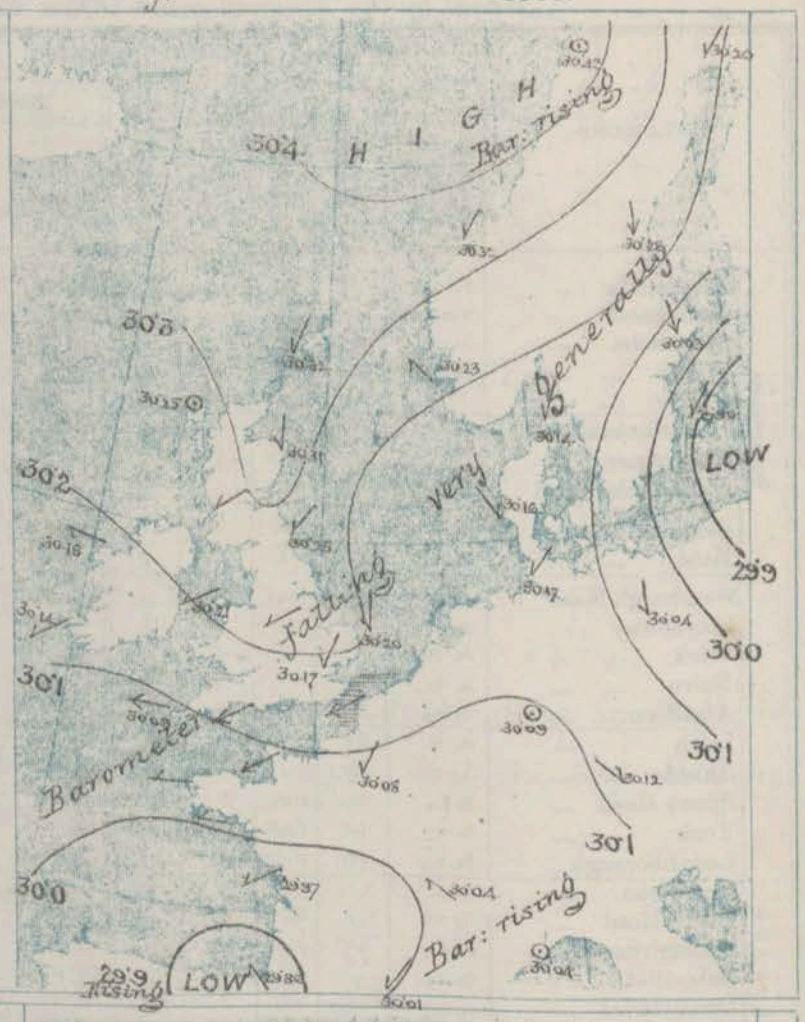
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

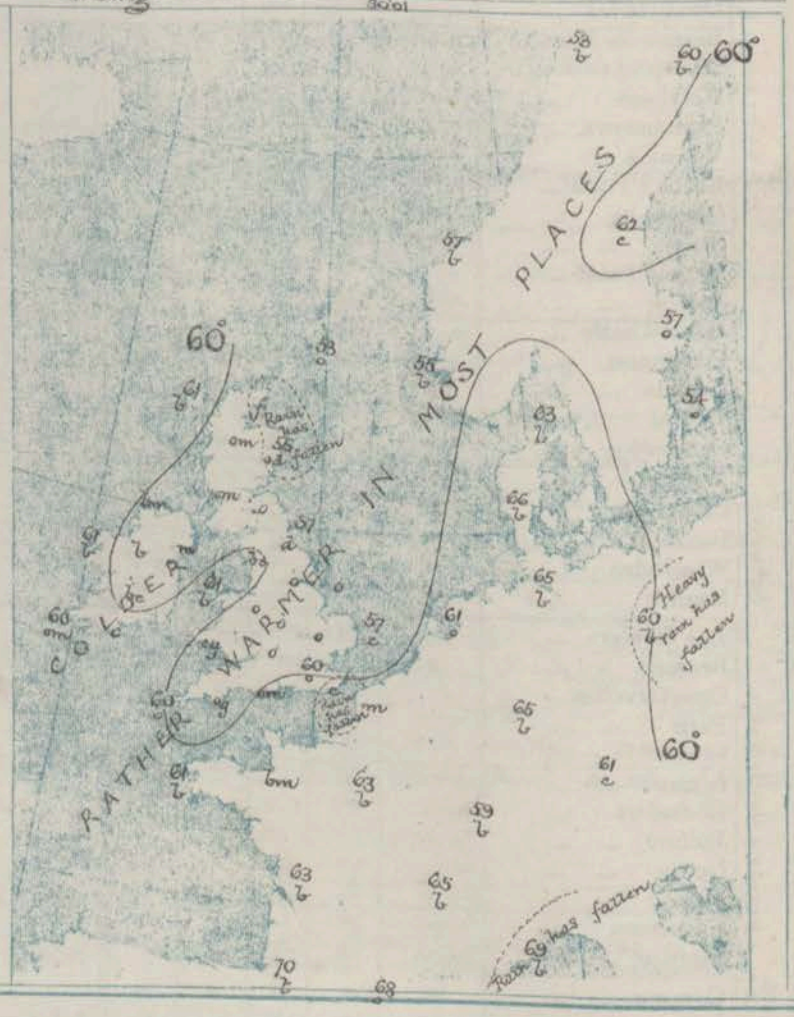
RAINFALL—A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30·20 ins. to 30·42 ins. over Scandinavia and the northern parts of our Islands – 30 ins. & more over the S. of Spain.
Lowest 29·9 ins. and less, in a depression over the Baltic, and in another near Biarritz.
Gradients moderate over Denmark, Holstein and the south of Sweden; slight elsewhere.
Barometer rising slightly over northern Europe, and also over Spain, falling a little elsewhere.

TEMPERATURE

Highest 70° at Biarritz, 69° at Nice, 66° at Fanö, 65° at Cuxhaven, Lyons and Lisbon, 63° at Paris.
Lowest 53° at Bodö and Sumburgh Head, 55° at Wick and Aberdeen, 59° at Mullaghmore and Spurn Head.
It is inclined to rise somewhat over France and England, and still more decidedly over Sweden.

WIND

N. by W. over Scandinavia and the North Sea – strong in Sweden, light elsewhere.
Fresh E. by N. in the Channel – moderate E. by N. over the Bay of Biscay.
Light E. by N. at our western stations – very light and variable over Scotland.

WEATHER

Fine and bright in Norway, Denmark, Germany, France and Ireland.
Dull over Sweden, Great Britain and the English Channel – with misty drizzle on our northeast coasts, haze in the Channel, thunder at Biarritz.
A good deal of rain has fallen at Berlin, and a little at some of the northern stations & Dungeness.

SEA

Rather rough at Cape Gris Nez, moderate in the Channel generally, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression in the East does not seem likely to affect our weather much, but that in the far south, will in spreading northwards probably cause some further increase of temperature in our Islands, and possibly less settled weather later.

FORECASTS

For the 24 hours ending at NOON on 5th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E	N. by E. breezes, light; dull and damp to fair.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	N.E. by E. winds, moderate; cloudy to fair.
6 SCOTLAND WEST 7 ENGLAND N.W.	E. by N. and S.E. by E. breezes, light; fine.
8 ENGLAND S.W.	Same as No. 3 to 5.
9 IRELAND NORTH 0 IRELAND SOUTH	E. by N. breezes, light; fine.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* ( ), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* ( ), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesmes ...	30·20	66	58	NNW	6	b	3
Sumburgh Head	30·40	57	56	NNE	1	o	1
Stornoway ...	30·33	63	59	E	2	b	2
Aberdeen ...	30·37	59	54	ENE	3	b	3
Shields	30·32	62	58	NNE	3	c	3
Ardrossan ...	30·29	72	61	NE	3	b	1
Malin Head ...	30·30	60	56	SE	3	o	1
Mullaghmore ...	30·26	68	66	E	4	bm	2
Belmullet ...	30·24	72	67	SW	1	o	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	30·27	62	56	ENE	4	bm	3
Valencia	30·20	69	62	SE	4	cm	4
Scilly	30·19	60	58	ESE	5	o	4
Jersey	30·18	64	59	ENE	5	b	4
Dungeness ...	30·21	65	60	ENE	5	c	3
London	30·06	62	57	NE	2	o	*
Yarmouth ...	30·27	61	58	NNE	4	c*	4
Rochefort ...	30·07	86	71	ENE	5	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest 30.40 ins. and upwards, in an anticyclone lying over the north and east of Scotland, and lowest 29.7 ins. and less, in a depression lying near St Petersburg. Another area of low readings 29.9 ins. and less, was, however, lying over Portugal. The wind was N.by over the greater part of northern and central Europe, and in Sweden strong breezes were reported. Over England, France and southern Europe, however, the wind drew into the NE.wd, while in the west of our Islands it was E.by. Variable airs prevailed over Austria and the South of Russia, and light S.by breezes in western Algeria. Fair weather was still reported over the greater part of the Continent, but an overcast sky was prevalent over central England, as well as in the northern parts of Russia and Italy. Rain was falling at Kucopis. Temperature had risen a little in Austria and Russia, as well as at some of the Spanish stations, but fallen in most other localities, readings ranged from between 70° and 80° over Spain, the Mediterranean and the Adriatic to a little below 55° in the Shetlands and the north of Scandinavia. The highest individual readings were 78° at Barcelona and Cagliari, 76° at Corunna and Syra, 75° at San Fernando and Brindisi, 74° at Leghorn, 73° at Trieste, and 72° at Bilbao, Madrid, Oran, Algiers and La Calle; the lowest were 52° at Bodo and Sumburgh Head, 53° at Kucopis, 54° at Haparanda and Christiansund, 55° at Ulealburg, Leith, Oxford and Prawle Point, and 56° at Hango, Donaghadee & Lorient.

In the course of the day the barometer fell slightly in all parts of western Europe, but no important change was observed in the winds or weather.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. in Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Friday 5th JULY 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	30·33	59	NW	2	b	30·24	+ ·04	64	57	+ 4	L	0	m	*	72	48	—
	Hernösand ...	30·30	62	NNE	2	b	30·34	+ ·06	64	58	+ 2	L	0	b	*	73	57	—
	Stockholm ...	30·13	61	N	4	c	30·12	+ ·09	62	58	+ 5	E	6	r	*	68	48	—
	Wisby	29·99	57	NE	4	r	30·01	+ ·11	59	55	+ 5	E	4	bc	*	64	50	0·24
	Bodö	30·38	54	W	1	o	30·26	— ·16	53	50	0	WSW	1	o	1	59	46	—
	Christiansund...	30·29	63	NNE	2	b	30·27	— ·05	59	57	+ 2	NW	1	f	1	66	52	—
	Skudesnaes ...	30·28	62	WNW	4	b	30·23	·00	67	55	+ 12	NW	2	bc	2	68	50	—
	Christiania Fjord (Færder)	30·23	70	ENE	4	c	30·15	— ·07	68	60	+ 6	NNE	6	b	2	72	62	—
	Skagen (The Scaw)	30·14	67	E	3	bc	30·10	— ·04	66	57	+ 3	NE	3	b	2	73	63	—
	Fanö	30·15	60	NNW	1	b	30·10	— ·06	68	61	+ 2	N	4	b	*	75	55	—
BRITISH ISLANDS.	Sumburgh Head	30·28	57	NNE	3	c	30·29	— ·03	55	55	+ 2	L	0	o	3	61	52	—
	Stornoway ..	30·24	59	NE	4	b	30·25	·00	57	56	— 4	NE	3	b	3	65	46	—
	Wick	30·32	55	SE	1	o	30·30	— ·03	59	56	+ 4	SE	1	o	1	59	52	0·03
	Nairn	30·27	59	E	1	o	30·26	— ·04	55	52	0	L	0	om	1	63	53	—
	Aberdeen... ...	30·29	56	NE	3	bc	30·30	— ·01	57	53	+ 2	E	1	c	1	60	53	—
	Leith ...	30·26	57	ENE	2	b	30·29	— ·01	57	52	+ 1	ENE	2	o	*	61	53	—
	Shields	30·23	58	N	2	c	30·25	·00	57	54	0	N	1	o	2	60	54	0·01
	Spurn Head ...	30·19	58	NE	4	o	30·23	+ ·03	59	57	0	NE	3	o	3	60	54	—
	York	30·23	62	ENE	1	o	30·26	+ ·03	61	56	0	NE	1	bc	*	65	55	—
	Loughborough	30·19	64	ENE	3	bc	30·24	+ ·02	60	52	+ 2	ENE	1	o	*	72	56	—
	Ardrossan ...	30·20	70	NE	2	bm	30·27	+ ·01	60	56	+ 3	NE	3	bm	2	72	54	—
	Malin Head ...	30·18	61	ESE	3	b	30·23	+ ·01	61	58	+ 3	E	1	brm	0	62	56	—
	Mullaghmore ...	30·17	69	ENE	2	bm	30·22	+ ·02	62	59	+ 3	E	4	brm	2	70	56	—
	Belmullet ...	30·18	71	N	1	b	30·21	+ ·03	64	60	+ 3	E	2	b	*	72	56	—
	Donaghadee ...	30·22	66	NE	3	b	30·27	·00	55	54	— 3	NE	2	m	0	67	54	—
	Barrow-in-Furness	30·18	69	ENE	3	b	30·23	+ ·01	57	55	— 4	NE	2	o	*	71	54	—
	Liverpool (Bidston)	30·17	67	E	5	b	30·25	+ ·02	58	54	— 1	E	1	o	2	73	57	—
	Holyhead ...	30·16	60	ENE	3	bm	30·21	·00	65	60	+ 4	L	0	brm	0	68	54	—
	Parsonstown ...	30·15	72	NE	1	b	30·21	+ ·02	55	55	— 1	L	0	f	*	76	46	—
	Valencia	30·16	67	NW	1	bom	30·19	+ ·05	59	57	— 1	L	0	om	0	68	52	—
	Roche's Point...	30·17	64	ESE	4	b	30·18	+ ·03	64	60	+ 2	E	1	b	2	65	52	—
	Pembroke ...	30·15	62	WNW	2	c	30·20	+ ·02	59	57	+ 1	E	2	bc	1	64	54	—
	Scilly	30·09	62	E	4	bm	30·14	+ ·05	61	60	+ 1	E	5	om	4	65	58	—
	Prawle Point ...	30·09	65	ENE	3	b	30·16	+ ·03	56	55	— 2	NE	5	ogm	3	66	55	—
	Jersey	30·04	69	NE	5	bm	30·13	+ ·05	60	58	— 4	ENE	4	om	3	71	58	—
	Hurst Castle ...	30·11	70	ENE	3	m	30·18	+ ·02	62	59	+ 1	NE	2	om	1	74	59	—
	Dungeness ...	30·11	61	ENE	6	b	30·14	·00	66	61	+ 6	ENE	5	bc	3	68	54	—
	London	30·14	69	NE	2	bc	30·19	+ ·02	63	59	+ 3	NE	1	bm	*	71	56	—
	Oxford	30·17	61	NE	2	c	30·21	+ ·01	61	58	+ 1	NE	2	bc	*	68	50	—
	Cambridge ...	30·17	64	N	1	o	30·21	+ ·01	63	60	+ 3	N	1	o	*	67	51	—
	Yarmouth ...	30·17	59	NNE	2	c	30·20	·00	62	60	+ 5	NNE	2	b	2	62	55	—
GERMANY.	Cuxhaven ...	30·10	67	N	5	bc	30·09	— ·08	66	62	+ 1	NNE	3	b	*	70	65	—
	Berlin	30·01	61	NNW	4	c	29·94	— ·10	60	56	0	WNW	4	o	*	70	54	—
	Wiesbaden ...	*	*	*	*	*	30·07	— ·02	64	58	— 1	L	0	b	*	79	54	—
	Munich	30·09	60	L	0	bc	30·09	— ·03	62	59	+ 1	NE	1	bc	*	73	55	0·04
FRANCE & NETHERLANDS.	The Helder ...	30·14	65	NE	3	b	30·15	— ·01	65	62	+ 4	NE	2	b	3	70	61	—
	Brussels 9am	*	*	*	*	*	30·13	·00	62	57	— 2	NNE	1	b	*	77	54	—
	Cape Gris Nez...	?	58	NE	5	m	?	?	63	57	+ 4	E	3	b	2	63	55	—
	Paris	30·02	78	ESE	2	bc	30·10	+ ·02	64	61	+ 1	NE	2	m	*	84	59	—
	Brest	?	72	E	3	b	?	?	62	60	+ 1	L	0	b	1	73	55	—
	Lorient	30·00	75	WNW	1	b	30·08	+ ·06	64	61	+ 4	E	1	b	0	84	59	—
	Rochefort ...	29·96	78	NNW	2	c	30·08	+ ·18	68	67	+ 5	SE	1	m	2	95	63	—
	Belfort ... ... ‡	30·04	66	E	1	b	30·02	— ·03	63	57	+ 4	E	1	b	*	81	56	—
	Lyons ... ... ‡	29·94	77	SSE	1	b	30·00	— ·04	69	65	+ 4	S	1	b	*	82	62	—
	Nice...	30·02	69	NW	1	b	29·97	— ·07	68	65	— 1	NE	1	m	0	77	63	—
	Perpignan ...	30·00	70	E	3	r	30·06	+ ·05	71	65	+ 3	NW	3	c	*	78	63	0·04
	Biarritz	30·02	67	W	5	o	30·17	+ ·31	66	63	— 4	W	5	o	3	90	64	—
PENINSULA.	Corunna	*	*	*	*	*	30·22	+ ·26	67	62	— 2	SW	2	o	2	73	55	—
	Lisbon	30·15	65	NNW	4	b	30·20	+ ·17	66	60	+ 1	NNW	4	b	2	70	59	—

For Explanation of Columns, see p. 1.

‡ Received too late for insertion in Charts on p. 2

WEATHER CHARTS

for 8 a.m. on Fridays 5th July, 1889.

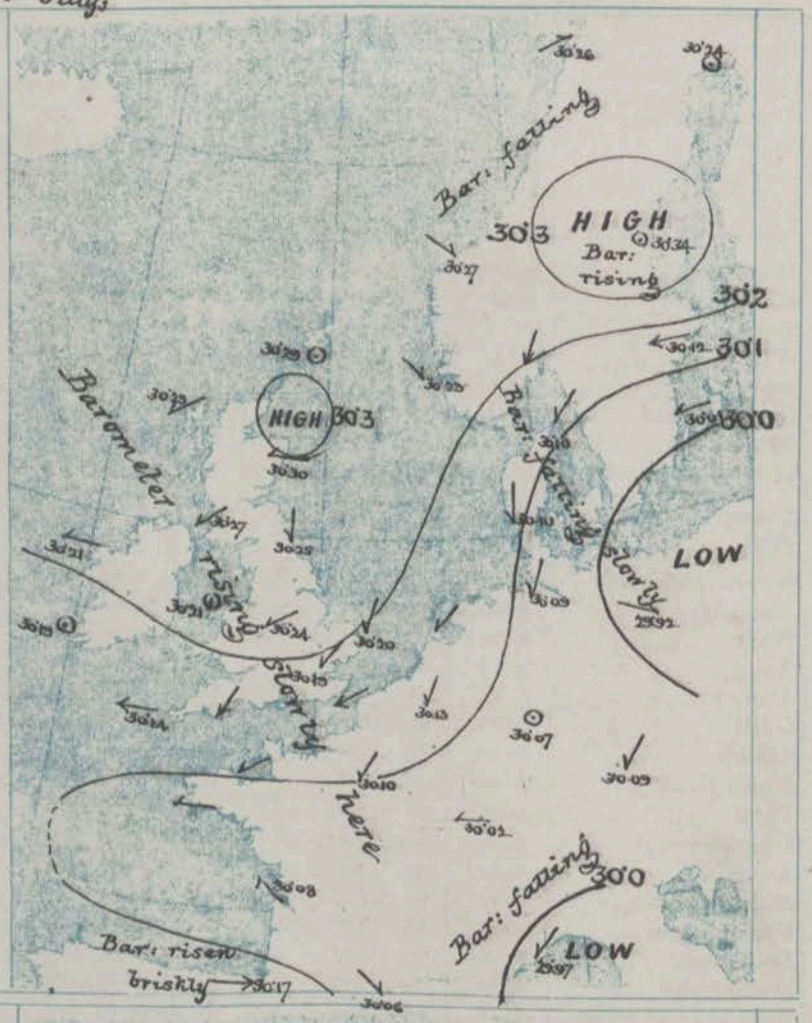
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE – Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

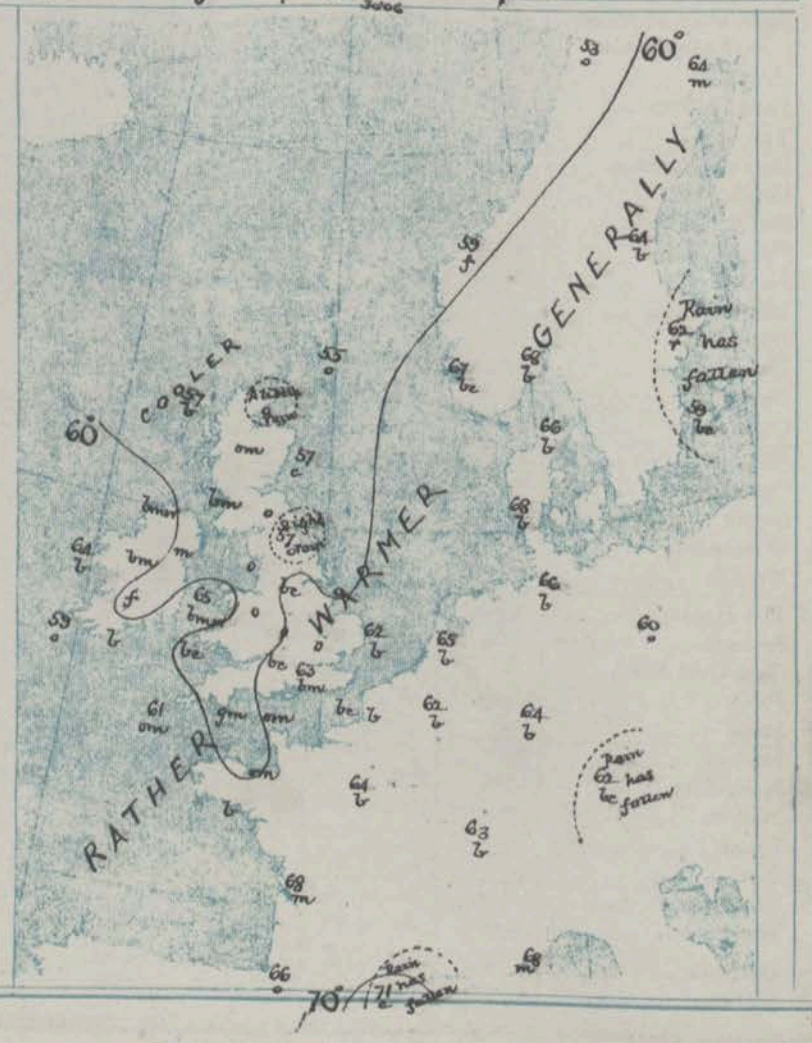
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

TEMPERATURE, & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL – A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (*Inches.*)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·90
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE — Highest 30.20 ins. to 30.35 ins. over the greater part of the British Islands, the North Sea and Scandinavia — 30.20 ins. and more, over the south of Spain. Lowest About 29.9 ins. over North Germany — 30.0 ins. and less, over the Gulf of Genoa. Gradient slight. Barometer rising slightly except over Germany.

TEMPERATURE — Highest 71° at Perpignan, 68° at Nice, Rochefort, Fano and Faarder, 67° at Skudesnaes, 66° at Cuxhaven, 64° at Paris, and 63° in London. Lowest 53° at Bodo, 55° at Lerwick Head and Nairn, 54° at Stornoway, Aberdeen and Shields. Daily maxima over our inland counties yesterday were slightly above 70°, at Paris and Lorient 84°, at Biarritz 90°, and at Rochefort 95°.

WIND — Fresh E.ly over the Baltic, light to moderate from N. and NE. over the North Sea, England and the Channel — Light E.ly at the Irish stations. Moderate NW.ly to W.ly over Spain, and also over Germany.

WEATHER — Fine and dry generally, but hazy in a great many parts of our Islands, foggy at Parsonstown. Considerable rain fell yesterday over the southern half of the Baltic.

SEA — Moderate at Scilly, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any important change beyond a further increase of temperature over our Islands and their neighbourhood generally.

FORECASTS

For the 24 hours ending at NOON on 6th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH; 1 SCOTLAND EAST	Varying light breezes; fine generally.
2 ENGLAND N.E; 3 ENGLAND EAST; 4 MIDLAND COUNTIES; 5 ENGLAND SOUTH	NE.ly or E.ly breezes, light; fine, very warm
6 SCOTLAND WEST; 7 ENGLAND N.W.; 8 ENGLAND S.W.; 9 IRELAND NORTH; 0 IRELAND SOUTH	NE.ly or E.ly breezes, light; fine, warm.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	30·26	68	58	W 4	b	3
Sumburgh Head	30·30	60	57	NNE 3	c	3
Stornoway ...	30·25	64	61	E 3	b	2
Aberdeen ...	30·30	59	56	ENE 3	o	3
Shields	30·25	59	58	N 2	od	3
Ardrossan ...	30·23	71	64	NE 2	b	1
Malin Head ...	30·21	59	56	ESE 4	b	2
Mullaghmore ...	30·19	68	63	ENE 4	bm	3
Belmullet ...	30·19	70	61	NNW 1	b	*
Holyhead ...	30·19	64	59	ENE 4	bm	3
Valencia	30·15	67	61	SE 1	cm	1
Scilly	30·09	64	62	ESE 5	be	4
Jersey	30·05	68	63	ENE 6	b	4
Dungeness ...	30·23	66	61	ENE 5	be	4
London	30·17	68	61	ENE 2	c	*
Yarmouth ...	30·19	60	57	NNE 2	c	3
Rochefort ...	29·95	87	76	NNE 2	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30·4 ins. and upwards, in an anticyclone lying over the northwest of Norway and the neighbouring portions of the Atlantic. The lowest readings 29·9 ins. and less, were found in three large but somewhat shallow depressions, one of which lay over the Baltic Provinces, another over the southwest of Russia, and the third over the southwest of France and the north of Spain. The wind was light or moderate from the NE.ᵗʰ over the greater part of northern and western Europe, but strong from the N.ᵗʰ in Sweden. Over Spain and Central Europe light or moderate NW.ᵗʰ breezes were reported, and in Italy and the South of France light variable airs, while in Algeria the wind was chiefly S.ᵗʰ. The weather remained fair on the whole, but a good deal of cloud was reported over Great Britain, and rain was falling at some of the Austrian and German stations. Temperature had changed very irregularly, and readings ranged from between 75° and 80° or a little above at many of the Mediterranean stations, to 58° or less, in the North and East of Scotland, and to 45° or less, over northern Russia. The highest individual readings were 83° at Algiers, 81° at Palma, 80° at Barcelona, 79° at Bilbao, 78° at Oran, 77° at Trieste and Brindisi, 76° at Cagliari, and 75° at Malta; the lowest were 44° at Archangel, 53° at Bodö and Sumburgh Head, 54° at Wisby and Warsaw, 55° at Riga, Kengahrwasser, Skudesnaes, Wick, Nairn and Aberdeen and 56° at Leith, Parsonstown and Oxford.

In the course of the day the depression over the North of Spain travelled northeastward to Central France, but no important change was observed in the winds or weather.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Saturday 6th JULY *1889.*

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	‡ YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Hapsanda ..	29.94	59	SW	2	b	29.82	− .02	63	58	− 1	Z	0	b	*	68	48	—
	Hernösand ...	30.06	63	S	2	b	29.85	− .49	68	60	+ 4	SW	2	b	*	82	54	—
	Stockholm ...	30.07	60	ENE	2	bc	29.88	− .24	64	58	+ 2	ENE	2	b	*	70	48	0.08
	Wisby	30.02	58	ESE	2	b	29.83	− .18	65	60	+ 6	ESE	4	bc	*	68	54	—
	Bodö	30.07	53	WNW	2	o	29.83	− .43	51	51	− 2	WSW	2	r	1	54	? 50	0.04
	Christiansund...	30.15	58	N	2	f	29.88	− .39	55	51	− 4	WSW	3	f	2	63	52	—
	Skudesnaes ...	30.08	53	NNW	6	bm	29.93	− .30	52	49	− 15	NNW	4	o	3	68	48	—
	Christiania Fjord (Fredar)	30.05	70	SE	2	c	29.86	− .29	67	60	− 1	SSE	2	c	2	73	64	—
	Skagen (The Scaw)	29.99	66	NE	1	bc	29.83	− .27	69	62	+ 3	S	1	b	1	75	61	—
	Fanö	30.03	59	N	2	bc	29.91	− .19	59	57	− 9	WSW	2	r	*	81	52	0.43
BRITISH ISLANDS.	Sumburgh Head	30.24	56	Z	0	o	29.98	− .31	52	52	− 3	NW	1	o	2	59	51	—
	Stornoway ..	30.21	56	NE	4	b	30.07	− .18	55	54	− 2	NW	2	o	2	59	50	0.02
	Wick	30.23	60	Z	0	c	30.00	− .30	55	53	− 4	NW	2	o	2	65	51	—
	Nairn	30.19	60	ENE	1	b	30.01	− .25	57	55	+ 2	Z	0	o	1	64	44	—
	Aberdeen... ...	30.24	59	SE	2	b	30.01	− .24	59	55	+ 2	NW	1	bc	1	63	46	—
	Leith ...	30.23	59	ENE	2	b	30.04	− .25	66	60	+ 9	W	1	bm	*	66	47	—
	Shields	30.21	61	E	2	b	30.05	− .20	58	55	+ 1	WSW	2	m	2	64	48	—
	Spurn Head ...	30.20	58	ENE	3	bc	30.07	− .16	62	59	+ 3	WNW	2	b	3	62	54	—
	York	30.19	72	E	2	b	30.11	− .15	? 61	55		WNW	1	b	*	76	48	—
	Loughborough	30.17	75	E	1	bc	30.14	− .10	61	57	+ 1	Z	0	bm	*	80	47	—
	Ardrossan ...	30.19	70	Z	0	bm	30.07	− .20	63	59	+ 3	NW	1	bm	0	70	56	—
	Malin Head ...	30.19	61	ESE	2	b	30.12	− .11	55	55	− 6	WNW	3	af	1	65	54	—
	Mullaghmore ...	30.18	72	E	1	bm	30.15	− .07	60	60	− 2	WSW	1	f	1	73	58	—
	Belmullet ...	30.18	68	NNE	2	b	30.18	− .03	57	57	− 7	NNE	1	af	*	73	57	—
	Donaghadee ...	30.22	62	SSE	2	b	30.12	− .15	62	60	+ 7	SE	2	m	0	63	54	—
	Barrow-in-Furness	30.17	65	NW	2	bc	30.11	− .12	60	58	+ 3	SE	3	c	*	68	56	—
	Liverpool (Bidston)	30.18	65	NNW	1	b	30.11	− .14	62	58	+ 4	WSW	1	b	2	72	54	—
	Holyhead ...	30.20	58	NNW	3	bm	30.13	− .08	62	59	− 3	WNW	1	bw	1	68	53	—
	Parsonstown ...	30.16	73	NE	1	bc	30.17	− .04	54	53	− 1	Z	0	o	*	77	47	—
	Valencia	30.19	67	NNW	1	bm	30.20	+ .01	65	61	+ 6	Z	0	bem	1	72	53	—
	Roche's Point...	30.20	65	ESE	1	b	30.19	+ .01	65	60	+ 1	NE	1	b	2	68	55	—
	Pembroke ...	30.15	64	N	3	b	30.14	− .06	64	61	+ 5	NW	1	b	0	65	55	—
	Scilly	30.15	61	ESE	3	bm	30.18	+ .04	62	61	+ 1	N	1	om	2	64	57	—
	Prawle Point ...	30.16	63	ENE	3	b	30.14	− .02	66	61	+ 10	ENE	1	b	0	66	55	—
	Jersey	30.12	70	NE	3	b	30.13	.00	69	62	+ 9	NE	1	bm	1	72	59	—
	Hurst Castle ...	30.15	67	SSW	2	m	30.14	− .04	67	63	+ 5	NNW	1	m	0	75	57	—
	Dungeness ...	30.19	65	ENE	4	b	30.10	− .04	63	57	− 3	N	3	m	2	69	50	—
	London	30.15	71	E	2	b	30.12	− .07	64	57	+ 1	Z	0	m	*	78	51	—
	Oxford	30.16	66	NE	2	b	30.14	− .07	61	56	0	Z	0	fw	*	76	49	—
	Cambridge ...	30.15	72	NE	1	b	30.11	− .10	63	57	0	N	1	b	*	77	47	—
	Yarmouth ...	30.17	65	NNE	3	b	30.08	− .12	63	59	+ 1	NNW	2	b	2	66	52	—
GERMANY	Cuxhaven ...	29.97	65	NNE	5	b	29.94	− .15	66	62	0	N	2	b	*	69	65	—
	Berlin	29.87	60	NW	4	c	29.85	− .09	59	55	− 1	NW	4	c	*	64	52	0.16
	Wiesbaden ...	*	*	*	*	*	30.05	− .02	63	59	− 1	NW	3	c	*	73	55	—
	Munich	30.05	62	NW	1	c	30.06	− .03	59	56	− 3	NW	2	o	*	70	52	—
FRANCE & NETHERLANDS	The Helder ...	30.09	64	N	2	b	30.01	− .14	63	61	− 2	NNW	2	c	3	68	63	—
	Brussels	*	*	*	*	*									*			
	Cape Gris Nez...	?	63	NE	3	b	?	?	60	58	− 3	N	2	b	2	70	57	—
	Paris	30.06	75	NNE	2	b	30.10	.00	62	57	− 2	WSW	2	m	*	82	55	—
	Brest	?	59	W	2	m	?	?	57	57	− 5	N	2	m	2	73	52	—
	Lorient	30.11	62	W	4	f	?	?	59	59	− 5	NW	3	f	2	77	55	—
	Rochefort ...	30.12	68	WNW	5	m	30.16	+ .08	65	63	− 3	NW	4	o	2	81	59	—
	Belfort	30.00	65	E	2	b	30.02	.00	59	54	− 4	SW	1	b	*	72	54	—
	Lyons	29.97	76	N	1	c	30.02	+ .02	68	62	− 1	N	1	b	*	79	62	—
	Nice...	29.91	69	Z	0	r	29.92	− .05	66	63	− 2	ENE	4	m	0	79	59	—
	Perpignan ...	30.07	73	NW	4	b	30.07	+ .01	69	60	− 2	NW	4	b	*	82	65	—
	Biarritz	30.23	66	W	4	o	30.21	+ .04	61	59	− 5	NW	5	r	3	70	59	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.24	65	NNW	5	b	30.23	+ .03	65	61	− 1	N	5	bc	?	75	63	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Saturday, 6th July, 1889.

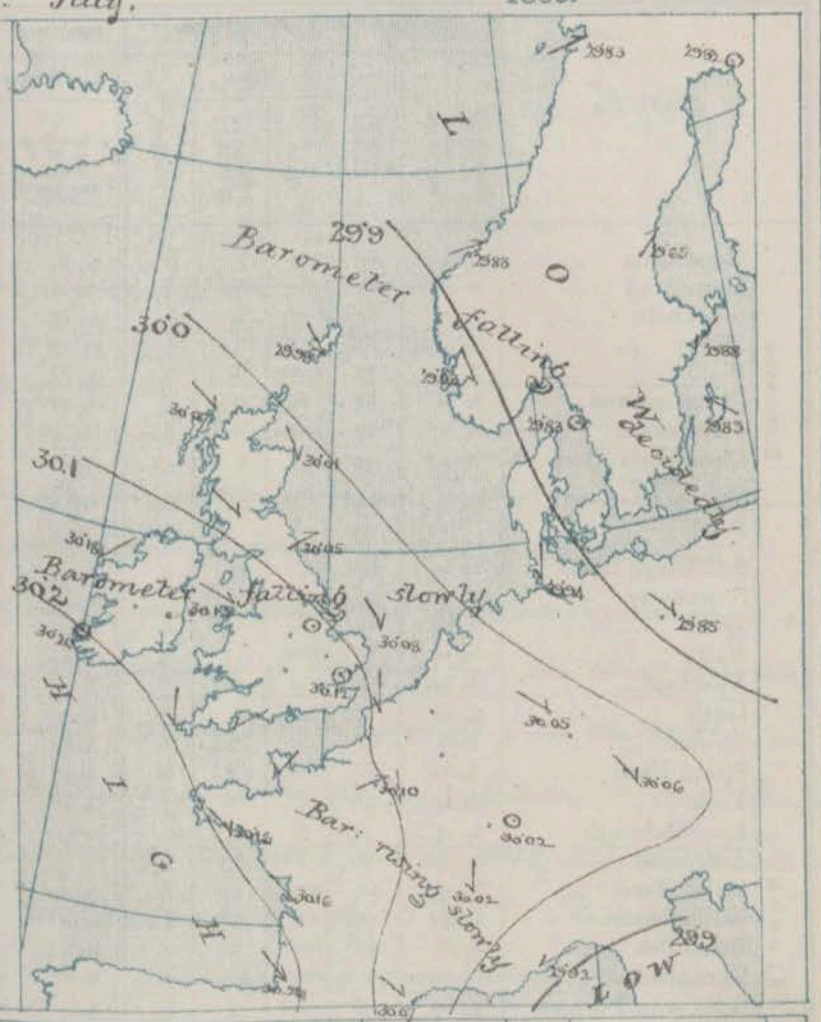
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE – Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

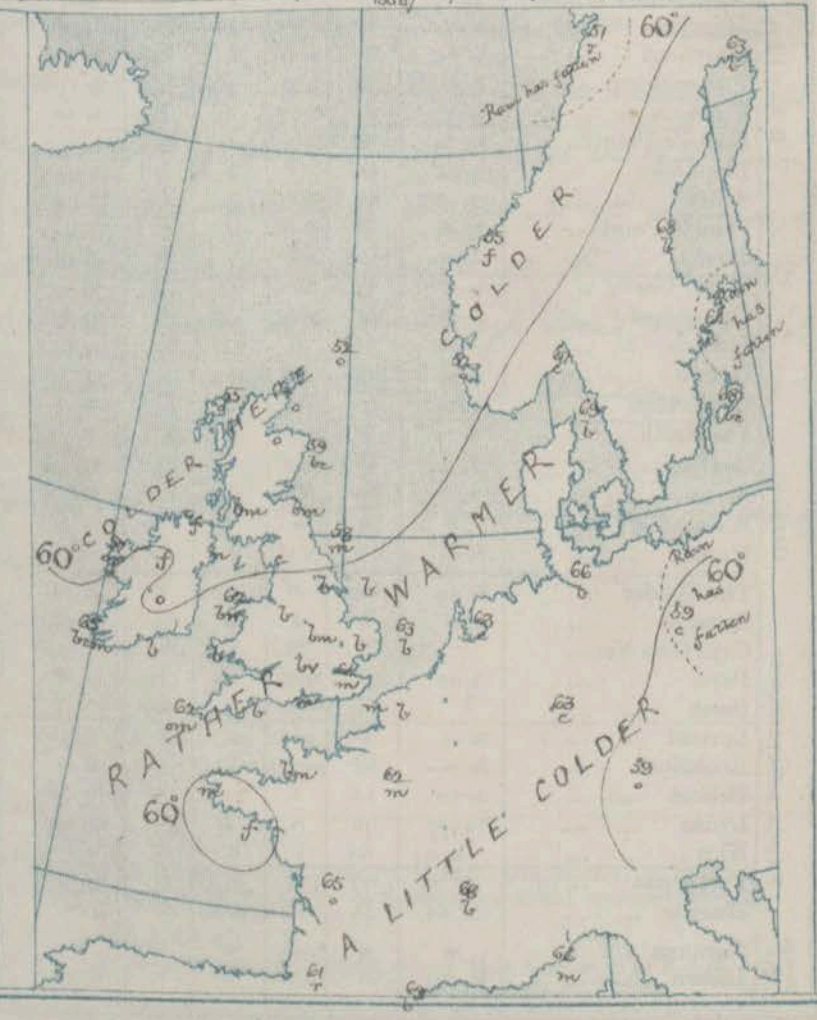
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL – A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE — Highest, 30·20 ins. and more off our extreme southwestern coasts and over the Bay of Biscay and Spain. Lowest, 29·9 ins. and less over Scandinavia, the Baltic and North Germany. Gradients slight. Barometer falling except in the extreme southwest, most in the north and northeast.

TEMPERATURE — Highest, 69° at Perpignan and the Scaw, 68° at Hernösand, 66° at Wick, Cuxhaven and Nice, 64° in London. Lowest, 51° at Bodö, 52° at Sumburgh Head, and Skudesnes, 54° at Valentia, 55° at Wick, Stornoway, and Malin Head. The daily maxima at our inland stations yesterday varied between 70° and 80°, that at Paris was 82°, but that at Berlin only 64°.

WIND — SW. in the northeast of Norway, NW. to N. elsewhere (except in Denmark), and light in force generally.

WEATHER — Still fine, bright, and dry over France, England, and the southeastern half of Ireland; cloudy elsewhere — rainy at Bodö and Paris, overcast and rainlike in the north of Scotland, very foggy in the north and northeast of Ireland.

SEA — Smooth generally, very smooth in the northwest.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The distribution of pressure this morning and the changes in progress are favourable for bringing about colder and less settled weather over the northern parts of the kingdom, and there may possibly extend to England later on.

FORECASTS

For the 24 hours ending at NOON on 7th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	NW. winds; cooler, some rain.
1 SCOTLAND EAST	
2 ENGLAND N.E	NW. and W. breezes, light; fine to unsettled and colder.
3 ENGLAND EAST	NW. airs; fine, warm today, less certain tomorrow.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	Same as No. 0 and 1.
7 ENGLAND N.W.	Same as No. 2.
8 ENGLAND S.W.	Same as No. 3 to 5.
9 IRELAND NORTH	NW. breezes, light; colder.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesnaes ...	30·15	67	58	NNW	6	b	3
Sumburgh Head	30·29	58	56	L	0	o	2
Stornoway ...	30·22	59	58	NE	3	b	3
Aberdeen ...	30·28	62	57	ESE	2	b	1
Shields	30·24	63	58	E	2	b	3
Ardrossan ...	30·23	70	63	NE	1	bc	1
Malin Head ...	30·23	61	58	ESE	3	b	1
Mullaghmore ...	30·21	72	61	NE	1	bm	1
Belmullet ...	30·24	71	64	NE	4	o	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ..	30·22	62	57	NE	4	bm	3
Valencia	30·20	69	60	SE	1	cm	1
Scilly	30·16	62	61	ESE	6	om	5
Jersey	30·14	70	65	ENE	4	bc	5
Dungeness ...	30·16	68	62	ENE	4	b	3
London	30·17	76	63	NNE	2	bc	*
Yarmouth ...	30·20	66	62	NNE	4	b	3
Rochefort ...	30·12	77	71	WNW	3	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30.2 in. to 30.3 in. and upwards, over the whole of Northern and Northwestern Europe and a little above 30.2 in over the north and west of the Iberian peninsula. The lowest readings, 29.9 in. and less, were found in a shallow depression lying over North Germany, but small subsidiaries with readings below 30.0 in. and less, were lying in the neighbourhood of Tunis and Malta. With the exception of the north of Scandinavia, where calms or variable airs were reported, the wind was E^ly or NE^ly in all parts of Northern and Northwestern Europe, while in Spain and the south of France it drew into the NW^ly. Over North Germany, however, a cyclonic circulation was shown round the depression noticed above, while over the Mediterranean, Italy, Austria and the south of Russia the wind was light and very variable. The weather was dull at some of our northern and eastern stations as well as in many parts of Germany, Austria and Poland, with rain at Prague. Elsewhere, however, conditions were fair or fine. Temperature had fallen a few degrees in most parts of Central and Southern Europe but risen in most other localities; readings ranged from between 70° and 78° over the Adriatic and Mediterranean to a little below 50° in the north of Russia. The highest individual readings were 78° at Cagliari, 76° at Algiers, 75° at Brindisi, Malta, La Calle and Tunis, 74° at Barcelona, Oran and Constantinople and 73° at Trieste & Sanguinaire; the lowest were 49° at Archangel, 53° at Bodö, 55° at Lerwick Head, Nairn, Donaghadee & Parsonstown and 57° at Stornoway, Aberdeen, Leith, Shields, Barrow-in-Furness, Breslau, Cracow and Prague.

In the course of the day the barometer fell somewhat briskly in the far north, but no decided change was experienced in the wind or weather. Temperature rose to a maximum of 77° at Cambridge, 78° in London and 80° at Loughborough.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

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DAILY WEATHER REPORT.

for Sunday 7th July *1889*

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.68	59	S	2	bc	29.63	— .19	61	60	— 2	SSE	2	o	*	68	55	0.04
	Hernösand ...	29.65	58	SSW	2	b	29.59	— .26	56	55	— 12	2	o	f	*	70	52	—
	Stockholm ...	29.87	62	SE	2	o	29.51	— .37	64	59	0	SE	2	r	*	73	65	—
	Wisby	29.67	57	SSE	4	c	29.54	— .29	60	57	— 5	SW	4	c	*	75	52	—
	Bodö	29.69	53	N	2	o	29.58	— .25	56	53	+ 5	N	2	c	1	?	50	—
	Christiansund...	29.60	54	W	1	r	29.41	— .47	56	54	+ 1	NE	4	o	3	?	52	0.16
	Skudesnaes ...	29.61	54	W	2	o	29.33	— .60	58	52	+ 1	SSE	4	o	3	57	50	0.12
	Christiania Fjord (Faerder)	29.54	63	S	4	b	29.40	— .46	62	57	— 5	SSE	5	o	3	68	61	—
	Skagen (The Scaw)	29.53	57	W	2	o	29.42	— .41	62	58	— 4	SW	3	o	2	77	55	—
	Fanö	29.68	57	WSW	2	o	29.46	— .45	62	61	+ 3	WSW	4	o	*	64	57	0.04
BRITISH ISLANDS.	Sumburgh Head	29.65	53	NW	2	r	29.50	— .48	50	50	— 2	N	5	o	5	59	48	0.41
	Stornoway ..	29.83	53	NE	5	r	29.48	— .49	49	47	— 6	NE	6	c	6	55	43	0.05
	Wick	29.94	50	N	4	r	29.62	— .38	49	47	— 6	N	5	o	2	56	45	0.12
	Nairn	29.95	56	NW	2	c	29.65	— .36	53	49	— 4	WNW	4	b	3	63	49	0.10
	Aberdeen... ...	29.77	56	NW	2	or	29.60	— .41	52	48	— 4	NW	5	cpu	4	65	48	0.11
	Leith	29.78	62	WSW	4	o	29.68	— .36	57	49	— 9	WNW	3	c	*	75	50	0.13
	Shields	29.48	70	W	4	c	29.44	— .41	54	51	— 4	NW	2	cp	2	75	48	0.06
	Spurn Head ...	29.80	69	WSW	4	c	29.65	— .42	59	56	— 3	WSW	6	o	4	75	56	—
	York	29.84	70	W	3	bc	29.66	— .45	58	54	— 3	W	3	o	*	79	54	—
	Loughborough	29.89	74	WNW	3	c	29.73	— .41	57	54	— 4	W	2	o	*	80	57	—
	Ardrossan ...	29.87	57	NW	4	ow	29.70	— .37	57	51	— 3	W	4	b	2	65	49	—
	Malin Head ...	29.92	54	NNW	5	or	29.81	— .31	53	49	— 2	NNW	5	bp	4	58	51	0.05
	Mullaghmore ...	30.01	58	WNW	4	om	29.87	— .28	55	50	— 5	WNW	4	c	2	63	52	0.04
	Belmullet ...	30.04	57	NNW	2	o	29.91	— .27	57	52	0	NNE	2	c	*	62	53	0.02
	Donaghadee ...	29.93	60	NE	3	bc	29.78	— .42	54	51	— 8	NNE	6	b	4	65	53	0.06
	Barrow-in-Furness	29.90	62	WNW	4	o	29.70	— .41	56	53	— 4	N	4	bc	*	67	54	0.04
	Liverpool (Bidston)	29.89	69	W	4	c	29.73	— .38	54	52	— 8	WNW	6	o	4	69	54	0.04
	Holyhead ...	29.94	60	SW	4	ow	29.79	— .34	53	52	— 9	NNW	5	pmgq	4	70	53	0.02
	Parsonstown ...	30.00	70	SW	2	bc	29.87	— .30	56	53	+ 1	SW	1	o	*	77	53	—
	Valencia	30.10	62	WNW	2	ow	29.94	— .26	58	56	— 7	NNW	1	ogm	1	69	56	—
	Roche's Point...	30.03	70	NNW	3	bc	29.89	— .30	60	57	— 5	NNW	4	o	3	71	57	—
	Pembroke ...	30.01	61	W	2	m	29.84	— .30	57	56	— 7	NW	3	ogm	2	64	56	—
	Scilly	30.07	64	NW	2	bm	29.91	— .27	61	60	— 1	NNW	5	om	4	67	59	—
	Prawle Point ...	30.03	63	W	3	b	29.86	— .28	60	59	— 6	W	3	omg	2	60	56	—
	Jersey	30.06	70	WNW	3	bm	29.93	— .20	61	59	— 8	WSW	5	om	4	74	55	—
	Hurst Castle ...	30.00	67	W	4	b	29.83	— .31	64	62	— 3	WSW	4	m	2	71	60	—
	Dungeness ...	29.95	65	WSW	5	bc	29.75	— .35	62	60	— 1	W	7	m	5	74	60	—
	London	29.92	76	WSW	2	b	29.77	— .35	61	59	— 3	WSW	3	og	*	79	57	—
	Oxford	29.90	68	SW	3	bc	29.75	— .39	64	59	+ 3	SW	4	o	*	78	58	—
	Cambridge ...	29.92	70	SW	1	c	29.71	— .30	65	61	+ 2	SW	1	o	*	79	56	—
	Yarmouth ...	29.88	66	SSE	2	b	29.71	— .37	63	60	0	WNW	3	c	2	68	60	—
GERMANY.	Cuxhaven ...	29.86	65	NW	3	c	29.64	— .30	64	61	— 2	SW	5	o	*	68	62	—
	Berlin	29.80	63	WNW	3	c	29.83	— .02	65	60	+ 6	SW	4	b	*	66	54	0.12
	Wiesbaden ...	*	*	*	*	*	29.91	— .14	61	58	— 2	Z	0	b	*	75	52	0.32
	Munich	30.02	56	SW	4	bc	30.04	— .02	61	57	+ 2	SW	4	b	*	64	48	0.83
FRANCE & NETHERLANDS.	The Helder ...	29.85	62	SW	1	bc	29.67	— .34	62	58	— 1	W	2	o	3	68	61	—
	Brussels	*	*	*	*	*	29.82	— .25	63	58	+ 3	SSW	5	b	*	77	58	—
	Cape Gris Nez...	?	63	SW	4	b	?	?	60	58	0	WSW	5	m	5	72	59	—
	Paris	29.99	74	N	2	bc	29.96	— .14	63	57	+ 1	NNW	2	b	*	81	54	—
	Brest	?	62	NNW	2	m	?	?	60	56	+ 3	W	2	m	2	61	52	—
	Lorient	30.06	62	W	4	bc	30.03	?	59	58	0	W	2	m	2	64	55	—
	Rochefort ...	30.13	67	WNW	4	c	30.08	— .08	63	62	— 2	WNW	4	o	2	70	57	—
	Belfort	29.98	63	E	1	b	29.98	— .04	60	54	+ 1	SSE	1	b	*	70	53	—
	Lyons	29.98	67	W	3	c	30.02	.00	62	60	— 6	E	1	b	*	78	59	—
	Nice...	29.89	65	S	4	rtl	29.93	+ .01	64	60	— 2	ENE	4	bc	1	79	59	0.63
	Perpignan ...	30.02	74	NW	3	bc	30.04	— .03	69	61	0	NW	3	b	*	79	64	—
	Biarritz	30.18	64	WNW	5	o	30.13	— .08	64	60	+ 3	WNW	5	o	3	68	61	0.01
PENINSULA.	Corunna	*	*	*	*	*	30.22	+ .07	66	?	0	NNW	1	o	0	72	59	—
	Lisbon	30.17	64	NNW	5	b	30.13	— .10	64	58	— 1	NNW	5	b	4	73	61	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2*

WEATHER CHARTS

for 8 a.m. on Sunday, 7th July, 1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

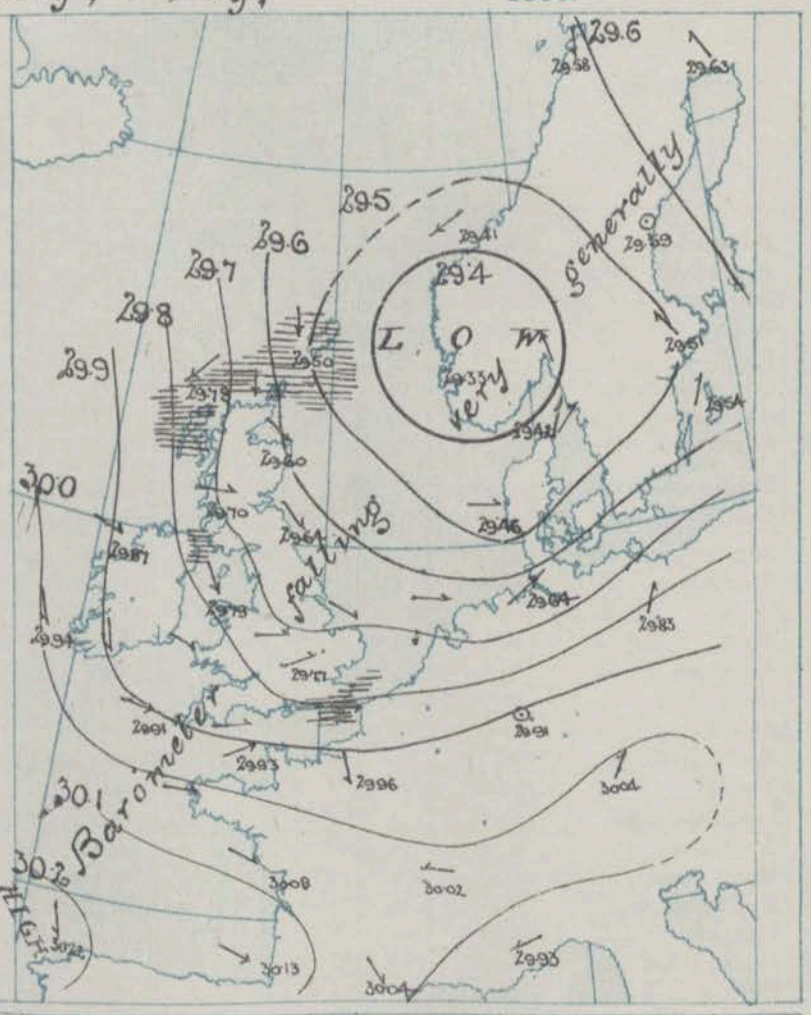
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



TEMPERATURE. & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

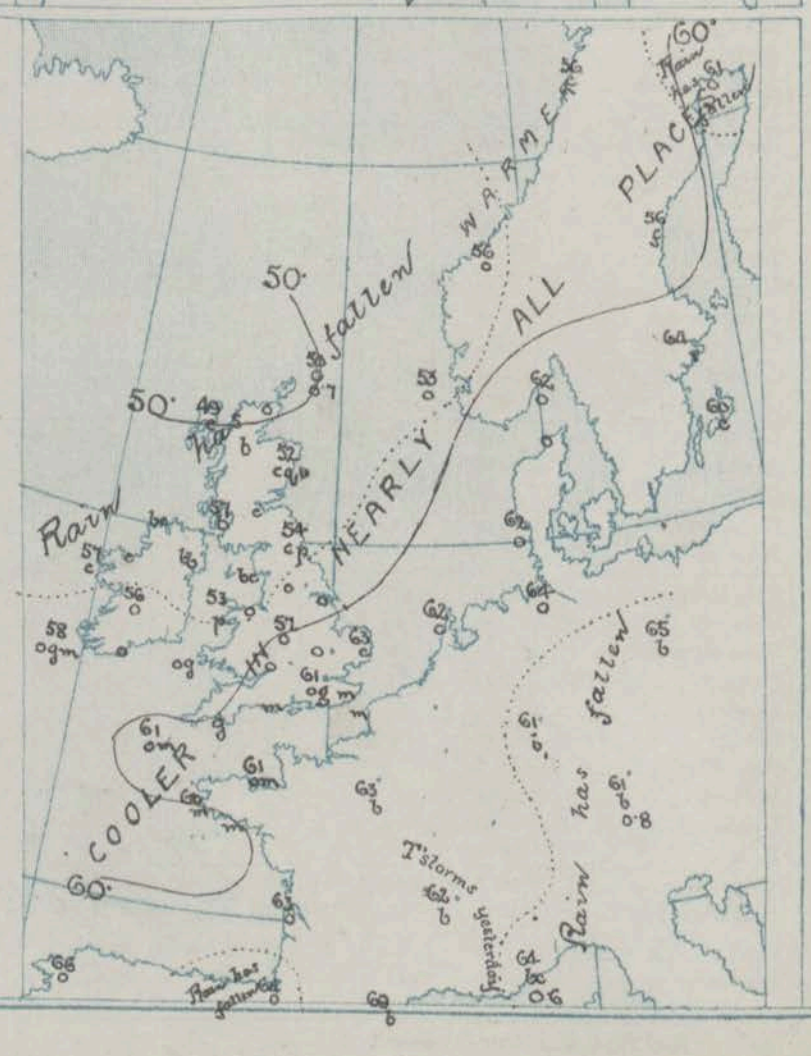
RAINFALL—A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 5	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE — Highest, 30.2 in. to 30.0 in. over Spain, the Bay of Biscay and the west and south of France. Lowest, 29.4 in. and less in a depression lying over the southwest of Norway (to which position it had apparently advanced from Germany). Gradients moderate to rather steep, but irregular. Barometer falling generally and irregularly.

TEMPERATURE — Highest, 69° at Perpignan, 66° at Corunna, 65° at Berlin, 64° at Oxford & Cuxhaven, 63° at Paris, 62° at the Skew & 61° at Haparanda. Lowest, 49° at Wick and Stornoway, 50° at Lerwick Head, 52° at Aberdeen, 53° at Malin Head and Skudesnaes. It was falling generally over the northern and western parts of the Kingdom.

WIND — Blew a moderate gale from NE. at Christiansund – while it was moderate to strong from between N. and W. over the British Islands and the Channel, S.W. over Germany and Denmark and S. in the south of Norway.

WEATHER — Was cloudy or overcast and unsettled in the British Islands and in fact over Northwestern Europe generally, with rain in several places. Over Central France and Western Germany, however, it was bright. Rain had fallen generally in the north and northwest, heavily at Lerwick Head.

SEA — rough in the far north and in the Straits of Dover, moderate on our other coasts generally, smooth in the Bay of Biscay.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 8th JULY 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	NONE ISSUED.	6 SCOTLAND WEST	NONE ISSUED.
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		0 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesnaes ...	29.78	56	53	NNW	4	o	3
Sumburgh Head	29.80	52	52	NW	2	r	2
Stornoway ...	29.95	54	54	NW	3	r	3
Aberdeen ...	29.87	58	54	SE	2	og	2
Shields	29.86	74	66	W	3	c	2
Ardrossan ...	29.95	63	58	NW	4	bc	2
Malin Head ...	30.02	58	55	NW	4	o	3
Mullaghmore ...	30.10	59	57	WNW	3	om	2
Belmullet ...	30.12	61	58	W	2	o	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	30.04	66	60	SW	3	bm	2
Valencia	30.07	69	63	NW	3	bm	2
Scilly	30.11	67	65	NNW	1	bm	2
Jersey	30.11	71	61	WSW	3	b	3
Dungeness ...	30.05	68	63	WSW	4	bc	2
London	30.02	78	62	W	2	bm	*
Yarmouth ...	30.00	68	62	NNE	3	b	2
Rochefort ...	30.17	73	66	WNW	4	d	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was giving way very decidedly over Northern Europe, and that the change was spreading westward to the northern coasts of Great Britain. The depression noticed over North Germany on Friday was still in force. Barometrical readings at 8 am varied from between 30.2 in. and 30.0 in. over Spain, France and the British Islands, on one hand, and over Russia, on the other, to less than 29.8 in. in the neighbourhood of the North Cape, as well as in a depression over North Germany, and to 29.9 in. and less in a shallow disturbance lying over Corsica. Thus while the wind over Poland, Russia and Finland was light from between S. and SE. that over Western Europe and the British Islands was mainly light from NW. The weather was fine over Sweden and Northern Russia, as well as over the Mediterranean, Spain, some parts of France and England, but was becoming foggy, gloomy and rainy at the extreme northwestern stations, in which regions also the thermometer was falling decidedly. Temperature was high (63° & 69°) over Russia, but was highest over the Mediterranean. The highest morning readings were 79° at Barcelona, 77° at Brindisi, 76° at Tunis and Cagliari, 75° at Malta and Oran, 74° at Constantinople, 73° at Syghion and Sanguinaire, 71° at Algiers, La Calle and Toulon and 70° at Trieste; the lowest were 51° at Bodö, 52° at Sumburgh Head and Skudesnaes, 55° at Christiansund and in the extreme north of Scotland and Ireland, and 57° at Belmullet and Rainn.

Later in the day the weather became less settled over the northern parts of the United Kingdom, rain fell in many places, temperature decreased and the depression over Germany began to move northwestwards.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Monday, 8 July, 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.60	56	ZS	0	0	29.62	-.01	48	45	- 13	N	4	0	*	66	?	0.16
	Hernösand ...	29.54	58	S	2	0	29.50	-.09	56	55	0	NE	2	0	*	70	54	0.08
	Stockholm ...	29.54	60	SSE	2	0	29.61	+.10	62	59	- 2	SSE	2	0	*	70	54	0.04
	Wisby	29.64	68	SSW	6	0	29.70	+.16	62	60	+ 2	SSW	4	r	*	70	52	0.08
	Bodö																	
	Christiansund...																	
	Skudesnaes ...	29.28	57	S	2	c	29.28	-.05	57	52	+ 4	ESE	6	0	4	59	50	0.08
	Christiania Fjord (Fiorder)	29.38	61	SSW	6	bc	29.43	+.03	57	56	- 5	SSW	5	r	4	63	55	0.32
	Skagen (The Scaw)	29.43	58	WSW	3	c	29.46	+.04	57	53	- 5	WSW	4	bc	3	62	54	0.39
	Fanö	29.57	57	W	4	c	29.58	+.12	62	55	0	W	4	bc	*	63	52	0.12
	Sumburgh Head	29.41	48	N	6	r	29.41	-.09	53	53	+ 3	N	4	r	5	53	49	0.54
	Stornoway ..	29.73	51	N	6	cp	29.71	-.07	51	50	+ 2	N	4	0	4	55	43	0.16
	Wick	29.58	50	N	5	0	29.52	-.10	52	52	+ 3	N	4	r	2	55	46	0.30
	Nairn	29.63	52	WNW	4	0	29.62	-.03	52	50	- 1	WNW	3	0	3	57	45	0.17
	Aberdeen... ...	29.58	50	WNW	5	ogqp	29.55	-.05	53	49	+ 1	WNW	6	ogqu	4	56	47	0.14
BRITISH ISLANDS.	Leith	29.65	53	WNW	3	c	29.67	-.01	54	47	- 3	W	3	bc	*	68	44	0.23
	Shields	29.62	54	NE	1	p	29.67	+.03	53	48	- 1	WSW	3	b	2	58	43	0.11
	Spurn Head ...	29.65	57	ENE	2	bc	29.73	+.08	56	51	- 3	W	4	b	4	61	48	0.05
	York	29.66	58	W	3	0	29.73	+.07	55	50	- 3	W	3	b	*	65	42	0.03
	Loughborough	29.72	61	W	4	c	29.78	+.05	58	52	+ 1	WNW	1	bc	*	66	45	-
	Ardrossan ...	29.68	59	W	4	b	29.71	+.01	55	50	- 2	NW	4	b	2	61	49	-
	Malin Head ...	29.75	53	NNW	5	bp	29.79	-.02	52	48	- 1	N	3	bp	3	55	48	0.12
	Mullaghmore ...	29.81	56	NW	4	bcv	29.80	-.07	56	50	+ 1	NE	2	bc	2	60	48	0.01
	Belmullet ...	29.88	54	N	3	c	29.83	-.08	55	54	- 2	NE	2	c	*	58	44	0.01
	Donaghadee ...	29.76	57	NNE	5	bc	29.79	+.01	55	53	+ 1	NNE	5	b	3	60	53	-
	Barrow-in-Furness	29.70	58	WNW	5	b	29.72	+.02	54	49	- 2	NW	4	bc	*	60	52	-
	Liverpool (Bidston)	29.73	56	W	5	b	29.77	+.04	56	48	+ 2	WNW	2	b	3	59	48	0.01
	Holyhead ...	29.78	58	NW	3	c	29.78	-.01	59	52	+ 6	NNW	3	b	2	63	48	0.01
	Parsonstown ...	29.79	60	Z	0	b	29.83	-.04	51	48	- 5	Z	0	b	*	63	37	-
	Valencia	29.83	59	N	1	0	29.81	-.13	59	51	+ 1	NE	1	c	1	60	49	-
	Roche's Point...	29.79	60	WNW	3	0	29.79	-.10	58	52	- 2	N	1	b	2	61	48	-
	Pembroke ...	29.80	56	NW	2	c	29.75	-.09	58	55	+ 1	ENE	2	c	1	59	52	-
	Scilly	29.85	60	WSW	2	r m	29.70	-.21	58	58	- 3	NE	4	fd	4	63	56	0.94
	Prawle Point ...	29.85	59	WSW	3	0	29.75	-.11	57	57	- 3	E	1	f	1	66	56	0.29
	Jersey	29.90	63	W	6	b m	29.81	-.12	60	59	- 1	SW	5	odpm	4	65	59	0.09
	Hurst Castle ...	29.79	65	W	6	c	29.76	-.07	56	56	- 8	E	3	0	3	70	56	0.17
	Dungeness ...	29.70	63	W	7	c	29.78	+.03	56	55	- 6	NE	4	r	3	67	54	0.12
	London	29.71	65	W	2	0	29.79	+.02	55	50	- 6	ESE	1	od	*	71	55	-
	Oxford	29.76	58	W	3	b	29.78	+.03	57	49	- 7	W	2	bc	*	70	52	-
	Cambridge ...	29.73	61	W	1	c	29.78	+.07	58	51	- 7	Z	0	bc	*	70	45	-
	Yarmouth ...	29.61	61	W	2	c	29.77	+.06	57	52	- 6	W	3	bc	2	67	48	0.02
GERMANY.	Cuxhaven ...	29.63	60	SW	4	r	29.67	+.03	60	59	- 4	SW	3	c	*	68	59	0.12
	Berlin	29.75	72	SW	3	b	29.80	-.03	69	62	+ 4	WSW	4	bc	*	79	63	-
	Wiesbaden ...	*	*	*	*	*	29.93	+.02	67	60	+ 6	SW	4	c	*	75	57	-
	Munich	29.99	65	Z	0	b	30.07	+.03	66	61	+ 5	SW	4	b	*	73	55	-
FRANCE & NETHERLANDS.	The Helder ...	29.68	60	W	1	0	29.76	+.09	59	53	- 3	W	2	c	3	64	59	0.04
	Brussels	*	*	*	*	*	29.85	+.03	57	56	- 6	SW	1	r	*	76	56	0.20
	Cape Gris Nez...	?	61	W	6	m	?	?	55	55	- 5	Z	0	r	3	63	55	0.16
	Paris	29.89	68	SW	3	bc	29.93	-.03	59	58	- 4	SSW	3	0	*	79	57	0.04
	Brest	?	62	WSW	4	0	?	?	61	61	+ 1	W	4	0	5	72	54	0.08
	Lorient	30.00	62	W	3	0	29.88	-.15	60	60	+ 1	W	3	r	4	66	59	0.04
	Rochefort ...	30.06	66	WNW	4	0	30.04	-.04	65	62	+ 2	SW	4	0	2	68	57	-
	Belfort														*			
	Lyons	29.93	72	?	1	b	30.05	+.03	63	58	+ 1	N	1	b	*	79	60	-
	Nice...	29.95	71	NNW	1	bc	30.01	+.08	69	61	+ 5	NE	3	b	0	79	61	-
	Perpignan ...	30.03	73	NW	4	c	?	?	67	62	- 1	?	3	0	*	80	64	-
	Biarritz	30.11	67	WNW	3	c	30.11	-.02	64	60	0	SSW	2	0	2	70	61	0.12
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon.	30.03	66	NNE	5	b	30.01	-.12	64	60	0	N	5	b	5	73	51	-

For Explanation of Columns, see p. 4.

† *Received too late for insertion in Charts on p.* 2

WEATHER CHARTS

for 8 a.m. on *Monday, 8th July,* 1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—*Isobars are drawn for each tenth of an inch.*
Changes since previous morning are stated in words.

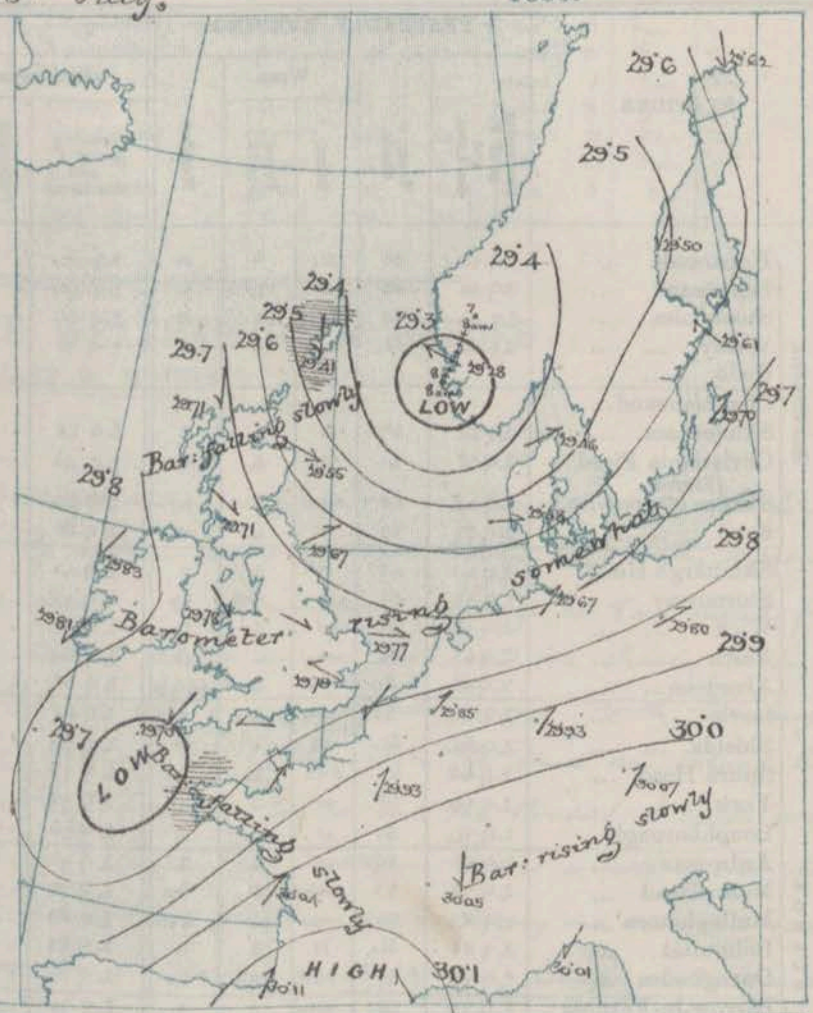
WIND - *Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—*
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE – *Where considerable, is shewn thus:*
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



TEMPERATURE, & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—*Isotherms are drawn for each 10°. Changes since previous morning are stated in words.*

WEATHER *is shown by Letters of the Beaufort Scale.*

RAINFALL—*A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.*

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	55 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—*The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.*

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·1 ins: and upwards, over the south of France
Lowest, 29·3 ins: and less, in a depression, lying off the south of Norway; 29·7 ins: and less, in a small shallow disturbance lying at the mouth of the Channel
Gradients moderate over Scotland and the North Sea, but slight elsewhere.
Barometer falling slightly at our extreme northern and southern stations, but rising in most other localities.

TEMPERATURE

Highest, 69° at Berlin and Nice, 67° at Wiesbaden and Perpignan, 66° at Munich and 65° at Rochefort.
Lowest, 48° at Haparanda, 51° at Stornoway and Parsonstown, 52° at Wick, Nairn, and Malin Hd., and 53° at Dumbrgh Hd., Aberdeen and Shields.
The highest maxima registered over our Islands yesterday were 71° in London and 70° at Hurst Castle, Oxford and Cambridge.

WIND

Moderate from the N.ward on our extreme north and northwest coasts, and from W. in the east.
Light from the E.ward or NE.ward over the southern parts of England and Ireland
Moderate from SW. over Denmark, Germany, the Netherlands and France; strong from ESE. at Skudenaes.

WEATHER

Fine over Ireland and the more central parts of Great Britain, as well as in Denmark, Germany and the south of France
Cloudy or overcast elsewhere with rain in the north of Scotland, slight drizzle in the south of England and fog at the mouth of the Channel.
Rain fell yesterday in many parts of the United Kingdom, the largest amounts being 0·9 in: at Reilly and 0·5 in: at Dumbrgh. Head.

SEA

Rather rough at Dumbrgh Head, but moderate to smooth elsewhere

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression off the south of Norway is inclined to travel in a westerly direction, but will probably fill up gradually.

The small disturbance at the mouth of the Channel may possibly advance eastwards and changeable showery weather is likely to prevail at most of our southern stations.

FORECASTS

For the 24 hours ending at NOON on 9th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	N. winds, moderate or fresh; rainy to fair.
1 SCOTLAND EAST 2 ENGLAND N.E	W. to NW. or N. winds, moderate or fresh; changeable, some rain.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	Light breezes, chiefly E.; cool, changeable, some rain.
6 SCOTLAND WEST 7 ENGLAND N.W.	NW. winds, moderate, fair generally but some showers.
8 ENGLAND S.W.	NE. winds, moderate; some rain and fog.
9 IRELAND NORTH 0 IRELAND SOUTH	N. and NE. winds, moderate; fair generally, but local showers.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	29.29	58	54	S 4	b	3
Sumburgh Head						
Stornoway ...	29.75	52	50	NE 6	c	6
Aberdeen ...						
Shields						
Ardrossan ...						
Malin Head ...	29.80	54	49	NNW 5	c	4
Mullaghmore ...						
Belmullet ...	29.89	57	50	NNW 3	bc	*

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Holyhead ...	29.79	62	54	WNW 4	b	4
Valencia						
Scilly						
Jersey	29.93	63	59	WSW 6	o	4
Dungeness ...	29.74	62	60	W 7	m	6
London						*
Yarmouth ...						
Rochefort ...	30.08	65	62	W 4	o	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed a decided fall of the barometer over Northwestern Europe, varying in amount from six tenths of an inch at Skudesnaes to about a quarter of an inch in the southwest of Ireland on the one hand and over the Gulf of Finland on the other. The morning readings varied from between 30.2 ins. and 30.0 ins. over Spain and the Bay of Biscay, and from between 29.9 ins. and 30.1 ins. over Russia to 29.4 ins. and less over the south of Norway, and to 29.9 ins. and less over the Mediterranean. Moderate to strong winds from between N. and W. prevailed over the British Islands, the Channel and on the Spanish coasts, moderate to strong SW. winds in Germany and SSW. to SSE. over the Baltic and Sweden, while at Christiansund there was a moderate gale from NE.

The weather was dull and unsettled over the United Kingdom, cloudy over Russia and Central Europe, the North Sea and Scandinavia, and rain fell at several stations. Over France and the Mediterranean it was fine but hazy in many places. Temperature was decreasing over the British Islands and the North Sea, but was not much below the average for the time of year except in the north of Scotland and the south of France. The highest morning readings were 77° at Brindisi and Cagliari, 75° at Barcelona, Malta, Constantinople and Odessa, 74° at Oran, 73° at Algiers, 72° at Sanguinaire and Rome. At the Russian stations the temperature ranged between 60° and 69°. The lowest were 49° at Stornoway & Leith, 50° at Sumburgh Head, 52° at Aberdeen, 53° at Malin Head, Holyhead, Nairn and Skudesnaes, 54° at Shields and 56° in the northwest of Norway.

Later in the day rain fell except in the far west; at Sumburgh Head and Scilly the amounts were large.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD FROM THE 30TH JUNE TO THE 6TH JULY 1889.

The weather during nearly the whole of this week was fair generally, the only rain reported in our islands consisting of slight and very local falls; even these were few in number. The wind has varied in direction between N. and E.; it has been moderate to strong in force at the Channel stations but slight elsewhere.

The air has been dry, but hazy; large amounts of low cloud have prevailed occasionally, but in the intervals the sunshine has been bright and warm. The highest of the daily maxima at our inland stations have exceeded 80°.

At the close of the week pressure was giving way very decidedly over Northern Europe, and the change was spreading to our islands; temperature was giving way decidedly in the extreme west and north, and rain and fog had begun to set in over those regions. The general distribution of pressure was assuming an unsettled character and colder, damper weather seemed likely to become general.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Tuesday, 9½ July, 1889.

Issued by the Meteorological Office. 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..														*			
	Hernösand ...	29.50	57	ENE	4	0	29.55	+.02	55	54	+2	S	2	c	*	70	54	0.12
	Stockholm ...	29.64	55	SW	2	c	29.68	+.07	63	55	+1	SW	4	bc	*	64	52	0.67
	Wisby	29.75	59	S	4	b	29.77	+.07	62	57	0	SW	4	bc	*	70	52	0.16
	Bodö	29.54	56	ENE	4	0	29.50	-.02	57	51	-3	NE	2	b	1	63	50	-
	Christiansund...	29.36	63	SW	2	c	29.55	+.24	58	57	-5	W	4	f	3	70	55	-
	Skudesnaes ...	29.48	57	WSW	2	c	29.68	+.40	58	56	+1	ESE	2	c	2	59	50	-
	Christiania Fjord (Farder)	29.51	58	SSW	6	c	29.56	+.13	58	55	+1	NW	3	bc	5	59	54	0.67
	Skagen (The Scaw)	29.59	57	W	4	0	29.63	+.17	60	56	+3	W	5	c	4	63	54	0.20
	Fanö	29.75	57	WSW	6	b	29.81	+.23	60	57	-2	WSW	6	c	*	64	55	0.04
BRITISH ISLANDS.	Sumburgh Head	29.54	53	N	3	r	29.76	+.35	52	52	-1	NNW	1	0	3	57	50	0.09
	Stornoway ..	29.76	51	NW	4	0	29.84	+.13	51	50	0	NE	4	0	4	52	47	0.05
	Wick	29.66	52	N	3	0	29.85	+.33	55	51	+3	N	2	0	1	55	48	0.15
	Nairn	29.71	53	WNW	2	0	29.83	+.21	54	52	+2	WNW	1	0	1	55	49	0.04
	Aberdeen... ...	29.67	54	NW	5	0	29.86	+.31	54	51	+1	N	1	0	2	57	52	0.22
	Leith	29.72	60	W	3	c	29.83	+.16	56	52	+2	NW	1	0	*	66	44	-
	Shields	29.71	64	W	3	b	29.84	+.17	58	52	+5	WSW	2	b	3	66	45	-
	Spurn Head ...	29.74	64	WSW	4	b	29.85	+.12	60	55	+4	E	2	bc	3	67	54	-
	York	29.75	64	W	3	b	29.86	+.13	58	52	+3	ESE	1	b	*	69	48	-
	Loughborough	29.78	65	Z	0	0	29.84	+.06	63	58	+5	SE	1	0	*	69	48	-
	Ardrossan ...	29.75	59	WNW	4	b	29.83	+.12	57	54	+2	S	1	c	1	62	48	-
	Malin Head ...	29.79	56	NNW	4	b	29.81	+.02	52	50	0	SSE	1	bc	1	58	48	-
	Mullaghmore ...	29.82	60	NNE	3	bc	29.80	.00	52	49	-4	E	4	c	2	61	49	-
	Belmullet ...	29.85	56	ENE	3	b	29.79	-.04	54	50	-1	SSE	3	or	*	58	47	-
	Donaghadee ...	29.81	59	NNE	4	b	29.83	+.04	52	51	-3	NE	3	c	1	62	51	-
	Barrow-in-Furness	29.77	59	NNW	4	b	29.81	+.09	53	50	-1	NNE	2	bc	*	60	48	-
	Liverpool (Bidston)	29.80	60	NW	2	b	29.81	+.04	57	48	+1	ESE	2	0	3	62	51	-
	Holyhead ...	29.83	55	NNE	2	b	29.77	-.01	55	52	-4	ENE	4	rgm	4	61	51	0.01
	Parsonstown ...	29.80	60	Z	0	c	29.76	-.07	50	48	-1	NE	1	r	*	65	48	0.01
	Valencia	29.81	60	NNW	2	cv	29.72	-.09	58	52	-1	NNW	1	b	1	64	46	-
	Roche's Point...	29.81	61	SE	2	bc	29.70	-.09	52	49	-6	ENE	3	c	3	63	49	0.20
	Pembroke ...	29.78	59	NNE	3	bc	29.70	-.05	56	56	-2	SSE	4	rgm	3	64	54	0.06
	Scilly	29.73	62	S	2	0	29.63	-.07	61	61	+3	S	5	rm	4	66	56	0.59
	Prawle Point ...	29.79	59	WSW	3	0	29.76	+.01	57	57	0	ESE	5	rg	3	60	56	0.43
	Jersey	29.86	64	W	5	bcpd	29.85	+.04	62	60	+2	SE	3	ogm	3	66	58	-
	Hurst Castle ...	29.79	60	WSW	4	0	29.86	+.10	61	60	+5	S	4	bc	3	65	56	0.07
	Dungeness ...	29.79	61	W	6	c	29.89	+.11	62	60	+6	WSW	4	c	3	65	55	0.18
	London	29.79	62	W	1	0	29.86	+.07	64	60	+9	WSW	2	c	*	64	55	0.09
	Oxford	29.81	60	SE	1	c	29.84	+.06	60	57	+3	SSE	3	0	*	62	54	-
	Cambridge ...	29.80	63	S	1	c	29.85	+.07	64	61	+6	S	1	c	*	69	54	-
GERMANY.	Yarmouth ...	29.78	61	SSE	3	bcv	29.87	+.10	62	60	+5	SE	1	b	2	64	55	-
	Cuxhaven ...	29.80	63	WNW	2	b	29.91	+.24	65	60	+5	WSW	2	b	*	66	?	-
	Berlin	29.90	70	Z	0	0	29.96	+.16	69	62	0	W	3	c	*	70	64	-
	Wiesbaden ...	*	*	*	*	*	30.03	+.10	66	61	-1	SW	4	c	*	72	57	-
	Munich	30.08	67	SW	2	b	30.14	+.07	67	62	+1	SW	2	b	*	75	55	-
FRANCE & NETHERLANDS.	The Helder ...	29.84	60	WSW	1	c	29.89	+.13	63	59	+4	NE	1	c	1	63	54	-
	Brussels .. ... 9 AM	*	*	*	*	*	29.96	+.11	64	62	+7	SSW	1	0	*	68	?	0.51
	Cape Gris Nez...	?	61	W	4	0	?	?	62	59	+7	WSW	4	c	4	66	55	0.08
	Paris	29.93	67	SW	3	c	29.99	+.06	65	62	+6	SSE	1	bc	*	74	?	0.04
	Brest	?	63	WSW	3	b	?	?	62	60	+1	SW	5	r	6	64	59	0.08
	Lorient	29.92	64	W	3	b	29.86	-.02	64	62	+4	S	2	0	4	66	59	-
	Rochefort ...	30.03	69	WSW	4	b	29.94	-.10	63	62	-2	ESE	3	c	2	72	55	-
	Belfort	30.07	64	S	1	b	30.00		61	54		SE	1	b	*	70	54	-
	Lyons	29.97	77	E	1	b	30.04	-.01	66	61	+3	SSE	2	b	*	80	60	-
	Nice...	30.03	72	WNW	3	b	30.08	+.07	70	64	+1	ENE	1	b	0	79	61	-
	Perpignan ...	30.01	73	SE	2	b	30.01	?	68	67	+1	Z	0	0	*	79	62	-
	Biarritz	29.96	70	NNE	4	b	29.83	-.28	73	67	+9	SSE	3	bc	2	75	61	-
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.95	66	NW	5	bc	30.00	-.01	65	61	+1	N	2	bc	?	77	63	-

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 8.*

WEATHER CHARTS

for 8 a.m. on Tuesday, 9th July, 1889.

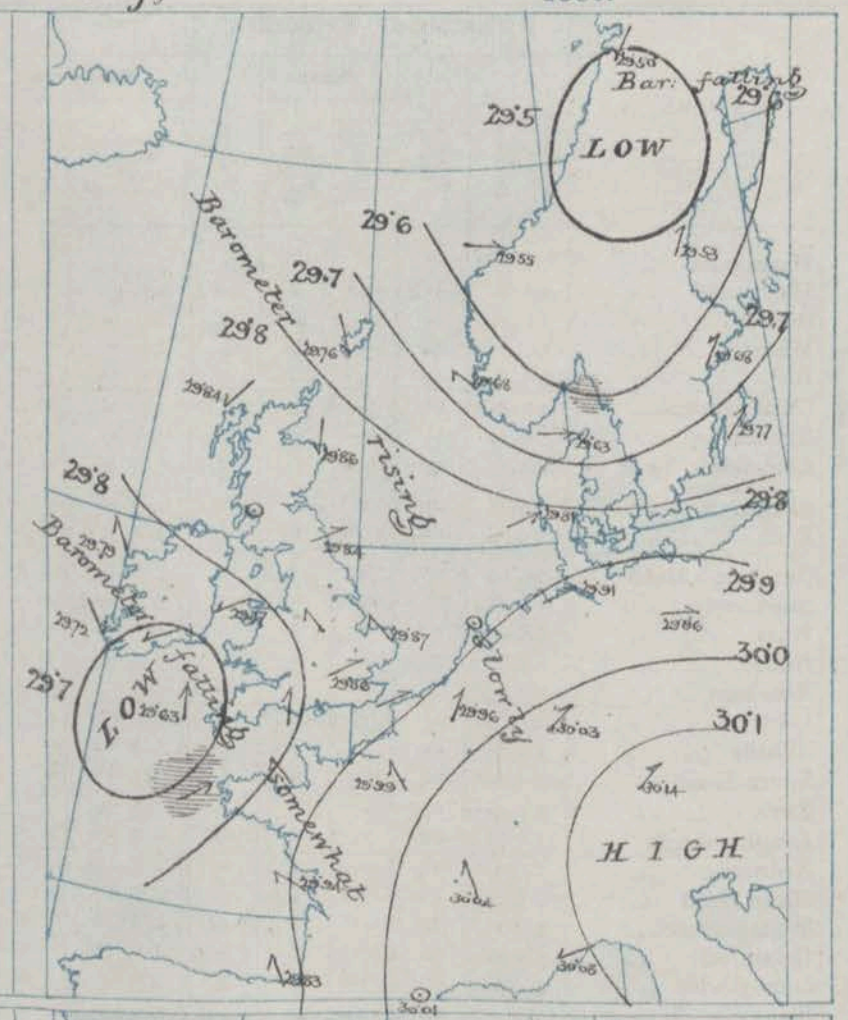
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
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York	29 · 910
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Valencia	29 · 939
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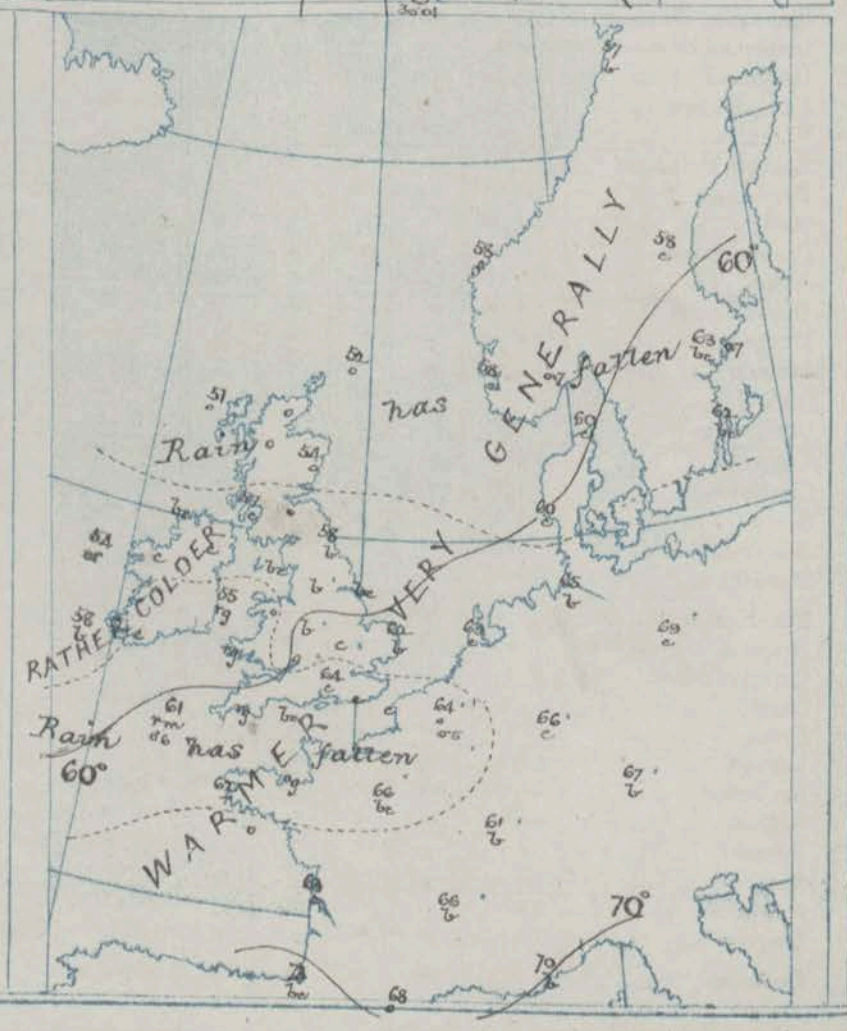
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 5	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·1 ins. and upwards, over Switzerland, South Germany, and the north of Italy.
Lowest, 29·5 ins. and less, in a depression lying over the north of Scandinavia; 29·7 ins. and less, in another disturbance lying over our southwest coasts.
Gradients moderate or slight generally. Barometer falling on the west coasts of our Islands and France, but rising elsewhere.

TEMPERATURE

Highest, 73° at Rimini, 70° at Nice, 69° at Berlin, 68° at Perpignan, and 66° at Wiesbaden and Lyons
Lowest, 50° at Parsonstown, 51° at Stornoway, 52° at Lerwick, Malin Hd. Mullaghmore, Donaghadee, and Rockle Point.
The highest maxima registered over our Islands yesterday were 69° at York, Loughborough and Cambridge, and 67° at Spurn Head.

WIND

Light to fresh from the S. and SE. over the greater part of England and France.
Light from N. or NE. at most of the Irish and Scotch stations.
W. on the eastern shores of the North Sea; SW. in Denmark and the south of Sweden.

WEATHER

Hazy at many of the western stations, and dull in Scotland, but fair or fine elsewhere.
Rain fell yesterday at our southern, extreme northern, and many of the Continental stations, the largest amounts being 0·7 in. at Stockholm and Tarbert, 0·6 in. at Scilly, and 0·5 in. at Brussels.

SEA

Rough at Brest and rather rough at Tarifa, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression over our southwest coasts seems likely to advance slowly in a northeasterly direction, and will probably occasion rain at most of the English stations.

FORECASTS

For the 24 hours ending at NOON on 10th July 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	N. to NE. winds, light; fair generally.
1 SCOTLAND EAST	N. to E. winds, light; dull, some rain.
2 ENGLAND N.E 3 ENGLAND EAST	SE. winds, light; fine to unsettled and some rain, thunder locally.
4 MIDLAND COUNTIES 5 ENGLAND SOUTH	SE. to S. or SW. winds, moderate; unsettled, some rain, thunder locally.
6 SCOTLAND WEST	S. to E. winds, light; fair generally.
7 ENGLAND N.W.	E. and NE. winds, moderate; unsettled, rain at times, thunder locally.
8 ENGLAND S.W.	S. to SW. or W. winds, moderate; rainy to fair.
9 IRELAND NORTH 0 IRELAND SOUTH	NE. winds, light or moderate; changeable, some rain.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* ( ), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* ( ), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnes ...	29.36	59	55	SSE 6	o	4	Holyhead ...	29.83	57	51	NNW 3	bc	2
Sumburgh Head	29.49	55	54	NNE 3	o	5	Valencia	29.81	61	56	N 2	bc	2
Stornoway ...	29.75	51	51	NW 4	r	4	Scilly	29.77	66	64	WSW 2	c	4
Aberdeen ...	29.61	56	52	NW 5	o q	4	Jersey	29.84	66	62	WSW 5	bc	4
Shields	29.68	55	57	W 4	bc	3	Dungeness ...	29.79	60	60	W 5	d	4
Ardrossan ...	29.73	60	54	WNW 4	b	2	London	29.80	58	55	E 1	or	*
Malin Head ...	29.81	58	52	N 2	bc	3	Yarmouth ...	29.78	62	57	E 4	bc	3
Mullaghmore ...	29.82	60	52	NW 2	b	2	Rochefort ...	30.04	69	58	SW 4	o	2
Belmullet ...	29.86	58	50	NNE 2	b	*							

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure varied from between 30·0 ins. and 30·1 ins. over Spain, the southern half of France, Switzerland, Austria and Dalmatia, as well as over the southeastern part of Russia, and from 29·8 ins. and more over the west of Ireland, to 29·3 ins. and less, in a somewhat complex depression lying over the southwest of Norway and to 29·7 ins. and less, in a smaller disturbance near Scilly. The wind consequently varied from NE. over the north of Norway, and from N. and NW. over Scotland and Ireland, to SW. over France, Germany, and Denmark and to S. over the Baltic and Gulf of Bothnia. Over Southwestern, Southern, and Southeastern Europe it was very variable in direction and light in force. The weather was fair over Russia, Poland, Austria, and on the Mediterranean coasts generally, as well as over Spain, very changeable elsewhere, though temporarily clear over the more central parts of the British Isles; elsewhere it was cloudy, with rain in some places, and fog in others, and a generally unsettled appearance of the sky. Rain had fallen at many of the Continental and British stations. Temperature was decreasing irregularly over Western Europe, but continued high over the Mediterranean and Adriatic, as well as over Southern and Central Russia. The highest morning values were 79° at Barcelona, 78° at Cagliari, 77° at Sfax, Brindisi and Constantinople, 75° at Trieste, 72° to 74° over Southern Russia, 72° at Lesina, Rome, Palermo, and Oran, 70° at Naples, and 68° at Kiev, Moscow, and Berlin; the lowest were 51° at Stornoway, 52° at Malin Head, and Nairn, 53° at Shields, Aberdeen, and Sumburgh Head, 54° at Leith, 55° at Belmullet, Donaghadee and in London.

Later on rain again fell locally over many parts of the Continent and British Isles, the falls varying considerably in amount in different localities.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Wednesday 10th JULY 1889

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.58	50	Z	0	bc	29.54	+ .10	56	52	+ 6	SW	2	bc	*	57	43	—
	Hernösand ...	29.58	57	Z	0	bc	29.70	+ .17	56	49	— 2	NE	6	bc	*	70	56	0.16
	Stockholm ...	29.65	59	WSW	2	b	29.78	+ .10	64	57	+ 1	WSW	2	c	*	68	48	0.39
	Wisby	29.86	61	SW	6	bc	29.87	+ .10	61	57	— 1	SW	4	b	*	72	54	—
	Bodö ... ... ‡	29.57	50	NW	2	b	29.67	+ .17	48	44	— 9	WSW	2	bc	1	57	45	—
	Christiansund... ‡	29.77	54	NW	4	f	29.80	+ .25	50	48	— 8	NNE	2	r	2	61	50	0.04
	Skudesnaes ...	29.82	58	WNW	4	o	29.81	+ .18	59	56	+ 1	WNW	2	o	3	66	55	—
	Christiania Fjord (Farder)	29.66	64	WSW	5	b	29.74	+ .18	66	61	+ 8	SSE	2	b	2	66	?	—
	Skagen (The Scaw)	29.76	58	W	4	bc	29.87	+ .18	60	55	0	W	3	o	2	64	55	—
	Fanö	29.91	54	Z	0	b	29.85	+ .04	60	56	0	SSE	4	c	*	66	50	—
BRITISH ISLANDS.	Sumburgh Head	29.84	53	NNE	1	r	29.84	+ .08	52	50	0	NE	2	o	3	55	49	0.04
	Stornoway ..	29.85	53	NE	3	bc	29.76	— .08	54	53	+ 3	E	5	bc	4	56	49	—
	Wick	29.87	53	N	2	o	29.81	— .04	55	51	0	E	2	o	1	58	48	—
	Nairn	29.83	57	ENE	3	c	29.77	— .06	53	52	— 1	E	3	c	2	59	48	0.04
	Aberdeen... ...	29.90	54	ENE	2	bc	29.82	— .04	53	51	— 1	ENE	3	o	3	58	48	—
	Leith	29.87	58	E	3	o	29.69	— .14	56	56	0	E	3	r	*	63	54	0.60
	Shields ... ... ‡	29.79	58	ESE	3	o	29.66	— .18	58	57	0	ESE	3	o	3	64	55	0.26
	Spurn Head ...	29.79	59	E	5	c	29.66	— .19	61	56	+ 1	SE	1	c	4	64	56	0.22
	York	29.78	64	E	2	o	29.67	— .19	62	61	+ 4	ESE	1	o	*	71	56	0.16
	Loughborough	29.75	68	SE	1	o	29.68	— .16	62	60	— 1	SSE	1	o	*	72	58	0.04
	Ardrossan ...	29.73	59	NE	2	rm	29.61	— .22	58	57	+ 1	NE	3	rm	2	63	53	0.50
	Malin Head ...	29.71	53	NNE	4	o	29.57	— .24	54	54	+ 2	ESE	4	or	3	55	49	0.33
	Mullaghmore ...	29.70	55	ENE	5	cgr	29.56	— .24	57	56	+ 5	WNW	2	onc	2	57	51	—
	Belmullet ...	29.72	57	NNE	1	b	29.58	— .21	58	54	+ 4	W	2	o	*	58	48	0.04
	Donaghadee ...	29.68	53	NE	3	r	29.58	— .25	56	56	+ 4	ESE	2	o	1	56	52	0.55
	Barrow-in-Furness	29.69	64	ENE	3	o	29.60	— .21	62	60	+ 9	E	4	bc	*	64	? 53	0.32
	Liverpool (Bidston)	29.69	64	SE	4	o	29.61	— .20	62	59	+ 5	SE	3	o	4	64	57	0.08
	Holyhead ...	29.63	64	SSE	4	o pg	29.58	— .19	57	56	+ 2	NNW	1	mg	2	64	52	0.54
	Parsonstown ...	29.66	50	N	1	o	29.59	— .17	57	49	+ 1	Z	0	o	*	53	48	0.03
	Valencia	29.65	62	NNE	2	b	29.63	— .09	60	54	+ 2	Z	0	b	1	64	44	—
	Roche's Point...	29.62	59	NNE	4	bc	29.59	— .11	56	52	+ 4	N	3	c	3	63	50	—
	Pembroke ...	29.59	58	SSE	5	r	29.52	— .18	58	58	+ 2	SE	3	ogp	3	61	56	0.52
	Scilly	29.60	62	Z	0	o	29.53	— .10	56	54	— 5	NNW	5	og	4	66	56	0.28
	Prawle Point ...	29.68	58	S	4	r	29.56	— .20	58	58	+ 1	SSE	4	rmw	3	59	56	0.90
	Jersey	29.75	63	SSE	3	ogm	29.67	— .18	62	61	0	SSE	4	orm	3	71	60	0.52
	Hurst Castle ...	29.75	68	S	2	c	29.68	— .18	60	60	— 1	S	2	orm	2	66	60	0.30
	Dungeness ...	29.80	64	ESE	8	cp	29.74	— .15	61	60	— 1	SW	4	c	3	69	59	0.35
	London	29.76	68	SE	1	or	29.72	— .14	64	60	0	S	2	o	*	72	58	0.19
	Oxford	29.73	61	S	2	r	29.67	— .17	60	59	0	SSE	3	r	*	70	58	0.25
	Cambridge ...	29.79	68	S	1	o	29.71	— .14	63	62	— 1	S	1	r	*	73	59	0.10
	Yarmouth ...	29.84	63	SE	4	bc	29.72	— .15	64	62	+ 2	SW	3	c	3	65	58	0.32
GERMANY.	Cuxhaven ...	29.95	68	N	2	b	29.85	— .06	65	63	0	SSE	3	r	*	70	64	—
	Berlin	29.95	74	Z	0	b	29.91	— .05	73	65	+ 4	SE	2	bc	*	79	64	—
	Wiesbaden ...	*	*	*	*	*	29.95	— .08	68	66	+ 2	Z	0	o	*	79	63	—
	Munich	30.04	69	SW	1	bc	30.09	— .05	72	63	+ 5	SW	5	b	*	79	57	—
FRANCE & NETHERLANDS.	The Helder ...	29.88	64	NE	1	bc	29.74	— .15	64	62	+ 1	SW	2	c	3	68	63	0.08
	Brussels 9am	*	*	*	*	*	29.84	— .12	72	63	+ 8	SSW	2	bc	*	76	62	0.20
	Cape Gris Nez...	?	64	NE	3	c	?	?	64	61	+ 2	SW	4	o	3	72	59	0.67
	Paris	29.87	77	SE	2	o	29.88	— .11	65	63	0	S	2	c	*	83	61	0.24
	Brest	29.86	64	SW	4	o	?	?	63	62	+ 1	S	6	r	7	64	55	0.98
	Lorient	29.78	65	SSW	4	c	29.68	— .18	64	64	0	SSW	5	r	5	66	61	0.63
	Rochefort ...	29.89	69	W	3	o	29.83	— .11	67	65	+ 4	SSE	5	o	2	87	57	—
	Belfort	29.91	70	SSW	1	b	29.99	— .01	65	56	+ 4	SE	1	b	*	76	59	0.04
	Lyons	29.93	77	SSW	3	o	30.01	— .03	72	61	+ 6	S	4	b	*	87	66	—
	Nice...	30.06	70	SW	4	bc	30.09	+ .01	71	67	+ 1	E	3	b	0	81	61	—
	Perpignan ...	29.92	77	S	1	o	29.98	— .03	72	66	+ 4	E	1	b	*	89	63	—
	Biarritz	29.90	68	W	4	o	29.82	— .01	75	65	+ 2	S	2	b	2	86	63	0.24
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.96	68	WNW	4	b	29.98	— .02	66	64	+ 1	WSW	3	c	2	75	64	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Wednesday, 10th July, 1889.

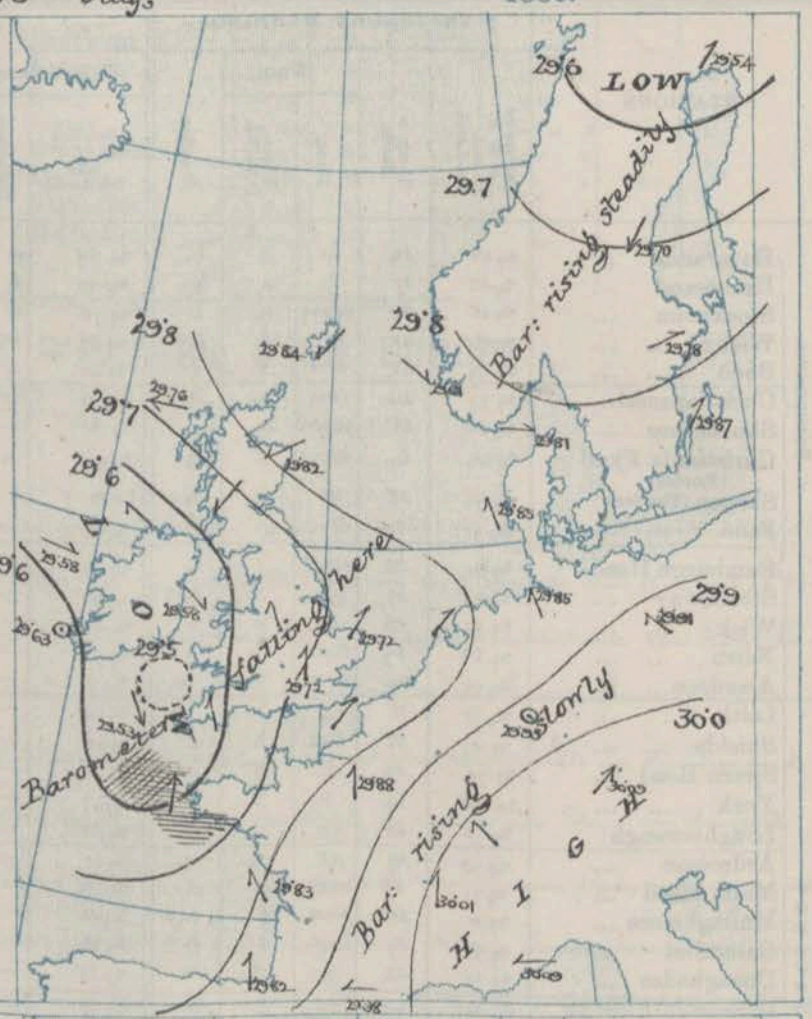
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

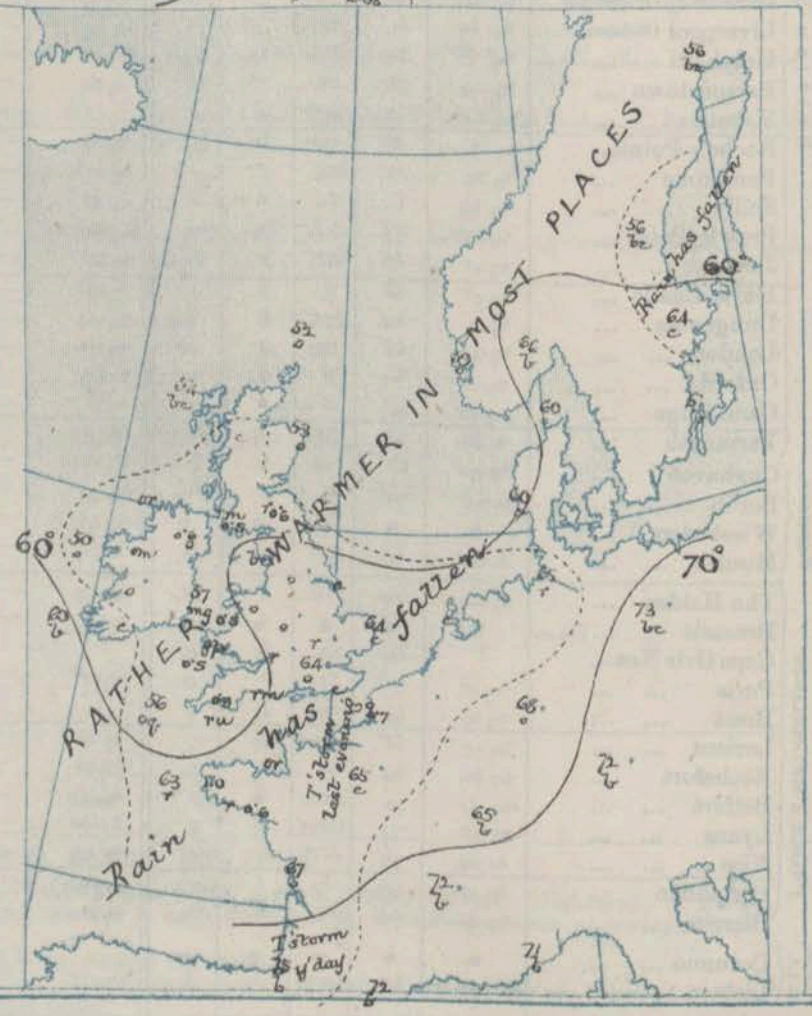
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE — Highest, 30.0 in. and upwards, over Switzerland, South Germany and the southeast of France. Lowest, 29.6 in. and less, in a large shallow depression lying over the west of our islands, and also in the north of Sweden. Gradients slight generally. Barometer falling slightly at all but the Scandinavian and southern French stations.

TEMPERATURE — Highest, 75° at Biarritz, 73° at Berlin, 72° at Munich, Lyons and Perpignan, and 71° at Nice. Lowest, 50° at Belmullet, 51° at Parsonstown, 52° at Lerwick Head, 53° at Nairn and Aberdeen and 54° at Malin Head. The highest maxima registered over our islands yesterday were 73° at Cambridge, and 72° at Loughborough & in London.

WIND — Light or moderate from the Sth. or S. over the greater part of England and France, but strong in the northwest of France. Light from the E.th in Scotland and the north of Ireland, N.th at Roche's Point and Scilly. Moderate from the W. or SW. at most of the Scandinavian stations.

WEATHER — Fine in Sweden, Denmark and the south of France. Cloudy or overcast elsewhere, with rain in many parts of the United Kingdom & also in the northwest of France. Since yesterday morning heavy rain has fallen at our western and southern stations. Thunderstorms occurred last evening at Dungeness, Paris and Biarritz.

SEA — High at Brest and rather rough at Lorient, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The large depression in the west will probably continue to spread northward or northeastward, and unsettled showery weather is likely to prevail in most districts, with thunder in some parts of Great Britain.

FORECASTS

For the 24 hours ending at NOON on 11th JULY 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	E.ly winds, moderate; fair to unsettled, and some rain.	6 SCOTLAND WEST	Same as No. 1 and 2.
1 SCOTLAND EAST	E.ly and SE.ly winds, light; unsettled, some rain, thunder locally.	7 ENGLAND N.W.	Light variable breezes; changeable, some showers.
2 ENGLAND N.E		8 ENGLAND S.W.	Variable or NW.ly breezes; changeable, some showers.
3 ENGLAND EAST	S.ly winds, light; changeable, some showers, thunder locally.	9 IRELAND NORTH	
4 MIDLAND COUNTIES		0 IRELAND SOUTH	N.ly winds, light; fair generally, but some showers.
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* ( ), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* ( ), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesnaes ...	29.76	66	59	WNW	4	b	2
Sumburgh Head	29.83	53	53	NW	2	o	3
Stornoway ...	29.88	56	54	NE	3	c	3
Aberdeen ...	29.90	57	53	ESE	2	bc	2
Shields	29.83	61	58	E	3	c	5
Ardrossan ...	29.75	61	55	WNW	1	o	1
Malin Head ...	29.79	51	51	ENE	2	o	1
Mullaghmore ...	29.78	53	50	E	5	or	3
Belmullet ...	29.76	56	51	N	1	o	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	29.68	58	57	E	4	rmg	4
Valencia	29.68	61	56	NW	3	bv	3
Scilly	29.60	65	64	S	5	op	5
Jersey	29.80	64	62	SE	3	o	3
Dungeness ...	29.86	68	62	S	1	bc	1
London	29.83	70	61	SE	3	bc	*
Yarmouth ...	29.86	64	62	SSE	5	bc	3
Rochefort ...	29.84	75	69	S	4	r	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure varied from between 30.00 ins. and 30.15 ins. over the Mediterranean, the southeast of France, South Germany, Austria and Southern Russia, to 29.5 ins. and less in a shallow depression lying over the northern parts of Sweden and Norway, and to 29.7 ins. and less in another one advancing to the mouth of St. George's Channel from the southwestward. There was a cyclonic circulation of moderate winds over Northern Europe and another over the western and southwestern parts of our islands and the north of France, while over Central Europe the wind was extremely variable in direction and light in force. The weather was very changeable and unsettled over Northern and Western Europe, fine and bright in the south and southeast. Temperature was rather low in the extreme northwest, high in the south and east. The highest morning readings were 80° at Barcelona and Cagliari, 79° at Leghorn, 77° at Algiers, Sfax and Brindisi, 75° at Malta, Sanguinaire and Trieste, 73° at Nemours, La Calle and Toulon, 72° at Charlton and Boreaux, 71° at Buda Pesth, and 70° at Naples, Nice and New Fahrwasser; even at Archangel the temperature was 66°; the lowest were 50° at Parsonstown and Haparanda, 51° at Stornoway and Ulearborg, 52° at Sumburgh Head, Malin Head and even at Donaghadee, 54° at Aberdeen and Belmullet and 55° at Holyhead.

Later on the depression in the far north moved northward, while that over our southwestern districts underwent some modification and spread seawards. Rain fell generally over Ireland, England and France and severe thunderstorms occurred in the southeast of Kent. Temperature remained very low in Ireland.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Thursday, 11th July, 1889.

Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.62	50	N	0	bc	29.70	+.16	55	50	- 1	NNE	2	r	*	59	39	.
	Hernösand ...	29.73	58	SW	2	c	29.58	-.12	55	54	- 1	NE	6	0	*	66	52	0.12
	Stockholm ...	29.76	62	S	2	b	29.52	-.26	65	62	+ 1	SW	4	0	*	73	54	0.32
	Wisby	29.82	63	S	4	c	29.64	-.23	64	62	+ 3	SSW	4	r	*	73	57	0.12
	Bodö	29.75	48	WNW	1	b	29.73	+.06	50	46	+ 2	N	2	bc	1	52	41	0.08
	Christiansund...	29.77	53	NNW	3	c	29.69	-.11	52	46	+ 2	NNE	5	0	3	57	48	-
	Skudesnaes ...	29.69	57	NNW	4	0	29.56	-.25	54	51	- 5	NNW	8	c	4	?	50	-
	Christiania Fjord (Farder)	29.68	60	S	8	0	29.46	-.28	59	58	- 7	NE	2	0	2	?	54	0.51
	Skagen (The Scaw)	29.64	64	S	1	p	29.50	-.31	60	60	0	WSW	1	r	1	70	59	0.16
	Fanö	29.70	61	SW	1	c	29.60	-.25	62	60	+ 2	SW	6	0	*	72	?	0.014
BRITISH ISLANDS.	Sumburgh Head	29.80	53	NE	3	c	29.83	-.01	50	48	- 2	N	3	c	4	56	45	.
	Stornoway ..	29.76	52	NE	5	0	29.90	+.14	51	50	- 3	NE	4	0	4	55	47	-
	Wick	29.79	51	E	4	0	29.89	+.08	53	50	- 2	NE	3	0	2	57	48	0.03
	Nairn	29.75	53	E	2	r	29.87	+.10	51	49	- 2	E	2	0r	2	55	50	0.09
	Aberdeen... ...	29.74	51	NE	3	0gr	29.86	+.04	50	49	- 3	N	2	0dp	4	55	50	0.19
	Leith	29.68	53	E	4	r	29.80	+.11	52	52	- 4	E	2	r	*	57	51	0.87
	Shields	29.57	59	E	1	r	29.82	+.16	54	53	- 4	E	1	r	3	60	52	0.34
	Spurn Head ...	29.59	64	SSW	4	c	29.84	+.18	60	57	- 1	WSW	5	b	4	64	57	0.17
	York	29.56	60	ENE	1	r	29.83	+.16	61	58	- 1	WSW	3	b	*	69	55	0.36
	Loughborough	29.57	67	WSW	3	bc	29.90	+.22	62	57	0	W	4	b	*	69	53	0.33
	Ardrossan ...	29.63	55	NE	4	0	29.82	+.21	53	52	- 5	NE	1	rm	0	60	51	0.70
	Malin Head ...	29.59	57	E	4	0	29.80	+.23	53	53	- 1	ESE	3	0r	2	58	49	0.76
	Mullaghmore ...	29.60	60	W	2	0	29.81	+.25	59	55	+ 2	SSW	2	bc	2	62	54	0.15
	Belmullet ...	29.68	61	W	3	c	29.81	+.23	61	56	+ 3	SW	1	b	*	63	57	-
	Donaghadee ...	29.60	60	NNE	3	bc	29.80	+.22	57	56	+ 1	WSW	2	0	1	62	55	1.34
	Barrow-in-Furness	29.57	62	NE	3	0	29.79	+.19	58	57	- 4	SW	5	bc	*	64	57	0.28
	Liverpool (Bidston)	29.58	64	SSE	1	c	29.88	+.27	60	54	- 2	WSW	4	b	3	68	54	0.16
	Holyhead ...	29.60	57	WNW	4	md	29.88	+.30	58	54	+ 1	WSW	4	b	4	62	53	0.85
	Parsonstown ...	29.64	65	SW	1	c	29.86	+.27	58	54	+ 7	S	0	b	*	68	45	.
	Valencia	29.72	62	SSW	2	bcv	29.86	+.23	58	55	- 2	SSW	1	c	2	65	50	0.02
	Roche's Point...	29.68	63	WNW	2	c	29.87	+.28	62	57	+ 6	W	1	b	2	66	49	.
	Pembroke ...	29.69	58	SW	4	bc	29.91	+.39	60	57	+ 2	WSW	2	bc	2	60	55	0.23
	Scilly	29.78	62	WSW	2	c	29.91	+.38	65	60	+ 9	WSW	1	b	1	65	54	0.02
	Prawle Point ...	29.78	58	WSW	5	bc	29.96	+.40	57	55	- 1	SSE	1	0g	1	62	55	0.69
	Jersey	29.82	61	W	6	cm	29.99	+.32	63	61	+ 1	SSW	3	0g	3	70	57	0.03
	Hurst Castle ...	29.73	62	WSW	7	bc	29.99	+.31	63	61	+ 3	SW	2	bc	4	66	58	0.43
	Dungeness ...	29.67	61	SW	8	c	29.96	+.22	62	59	+ 1	W	5	c	4	69	57	0.02
	London	29.64	66	S	4	0	29.96	+.24	63	56	- 1	WSW	3	b	*	72	51	0.04
	Oxford	29.72	60	SW	4	0	29.95	+.28	60	56	0	SW	3	bv	*	68	52	0.45
	Cambridge ...	29.59	68	S	2	r	29.93	+.22	62	58	- 1	SW	2	b	*	70	50	0.13
	Yarmouth ...	29.59	65	SSE	4	bc	29.89	+.17	62	57	- 2	W	4	b	3	65	54	0.06
GERMANY.	Cuxhaven ...	29.80	68	WNW	2	b	29.76	-.09	65	63	0	WSW	5	bc	*	75	46	.
	Berlin	29.87	79	WSW	2	c	29.93	+.02	76	67	+ 3	W	4	b	*	90	68	.
	Wiesbaden ...	*	*	*	*	*	30.02	+.07	74	67	+ 6	SW	2	b	*	84	64	.
	Munich	30.08	73	NE	2	b	30.18	+.09	74	66	+ 2	W	4	b	*	81	61	-
FRANCE & NETHERLANDS.	The Helder ...	29.69	67	SSW	3	b	29.86	+.12	62	59	- 2	WSW	4	c	4	72	61	0.47
	Brussels .. ... 9 AM	*	*	*	*	*	30.02	+.18	62	56	- 10	SSW	3	c	*	81	58	0.12
	Cape Gris Nez...	?	63	SW	6	b	?	?	60	58	- 4	WSW	3	c	3	79	57	-
	Paris	29.84	80	SW	4	b	30.04	+.16	62	61	- 3	SSE	1	0	*	86	?	0.12
	Brest	?	64	W	3	0	?	?	60	59	- 3	S	0	0	2	64	57	-
	Lorient	29.88	64	W	1	c	29.99	+.31	63	62	- 1	SSW	2	c	5	66	61	0.08
	Rochefort ...	29.98	71	W	3	bc	30.08	+.22	67	65	0	SE	1	0	3	82	61	0.08
	Belfort	29.99	67	SE	1	b	30.10	+.11	64	56	- 1	SE	1	b	*	79	61	-
	Lyons	29.96	80	S	4	b	30.06	+.05	70	62	- 2	ESE	1	b	*	84	62	.
	Nice	30.08	75	W	4	b	30.12	+.03	73	64	+ 2	S	0	b	0	81	63	.
	Perpignan ...	29.97	72	E	4	b	30.06	+.08	68	68	- 4	E	2	0	*	82	63	-
	Biarritz	29.93	69	W	3	b	30.01	+.19	69	66	- 6	SSE	2	b	1	86	64	-
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.02	68	WSW	4	c	30.04	+.06	68	64	+ 2	SSW	4	0	2	73	66	.

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2*

WEATHER CHARTS

for 8 a.m. on *Thursday, 11th July.* 1889.

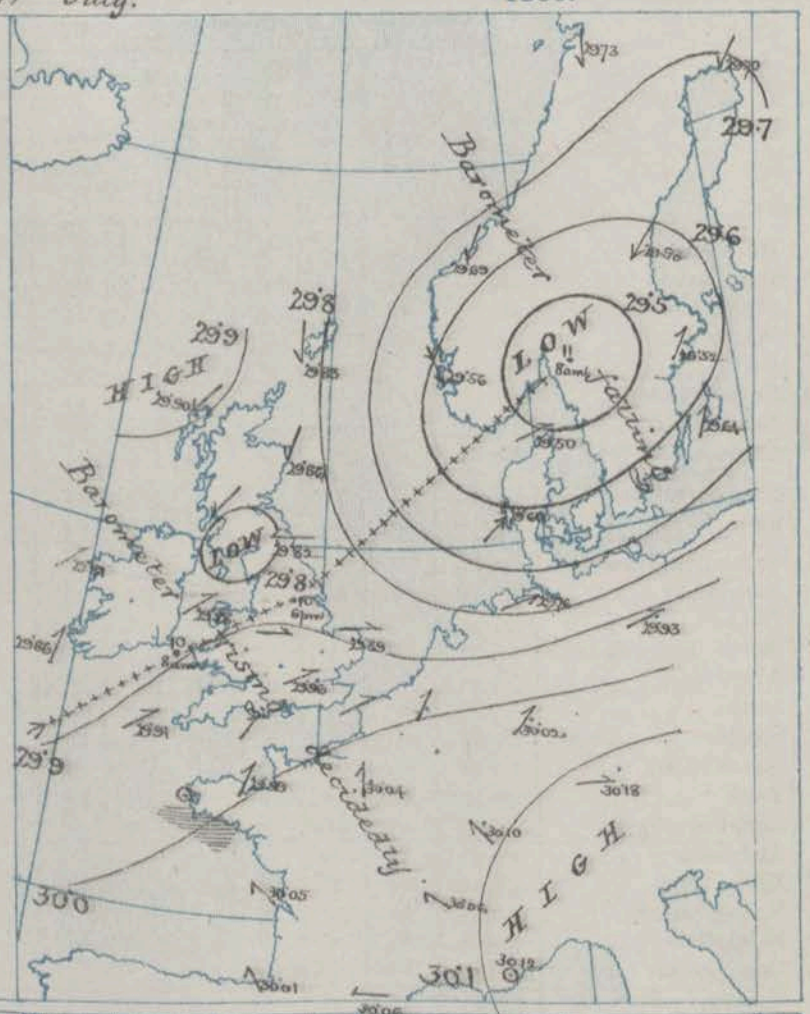
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE – Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

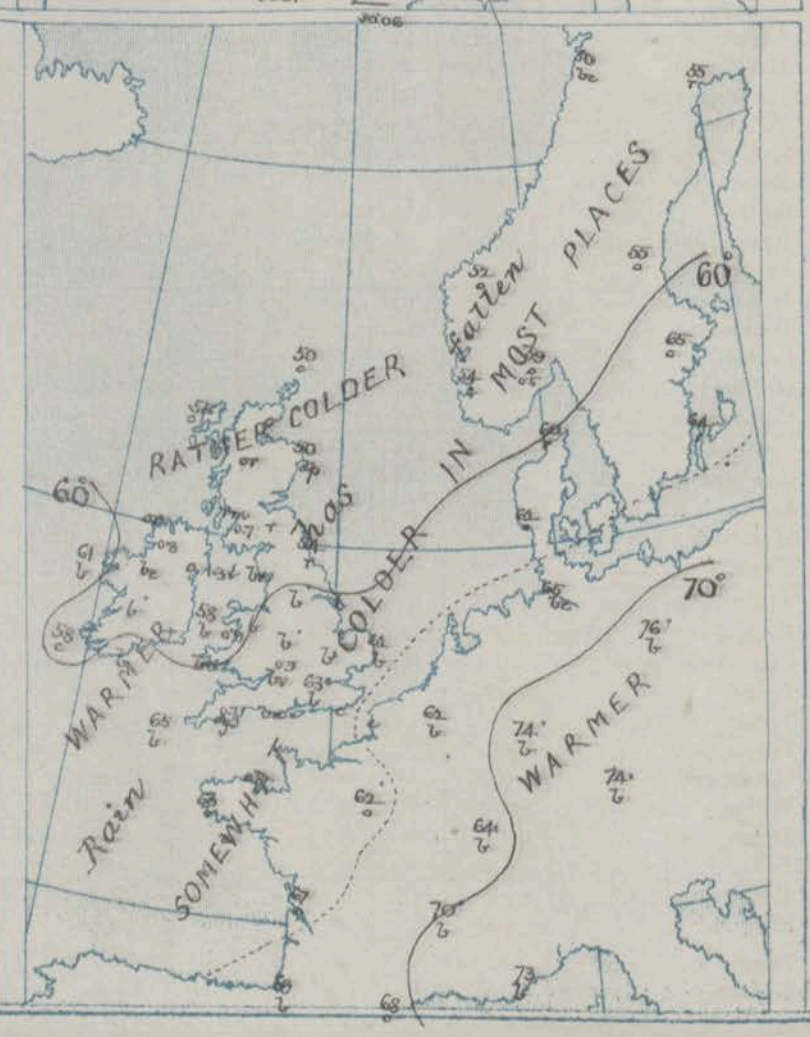
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL – A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·1 ins: and upwards, over Switzerland, South Germany, and the southeast of France.
Lowest, 29·5 ins: and less, in a large depression lying over the south of Scandinavia.
Gradient moderate over the North Sea and the Baltic, but slight elsewhere.
Barometer rising at all but the Scandinavian stations.

TEMPERATURE

Highest, 76° at Berlin, 74° at Wiesbaden and Munich, 73° at Nice, 70° at Lyons, and 69° at Biarritz.
Lowest, 50° at Bodö, Lerwick Head, and Aberdeen, 51° at Stornoway and Nairn, 52° at Christiansund and 53° at Wick, Leith, Anderson and Malin Hd.
The highest maxima registered over our Islands yesterday were 72° in London and 70° at Jersey and Cambridge, but at Berlin the thermometer rose to 90°.

WIND

Light from SE in France and light or moderate from the SW.ly quad. over Ireland, England and the North Sea.
Light from the NE.ly quad. in Scotland; moderate to strong from the same quarter in the north of Scandinavia.

WEATHER

Raining in the east and south of Scotland and the most northern parts of England and Ireland.
Fine in most other localities, but dull at the Scandinavian and some of the French stations.
During yesterday 0·7 in: of rain fell at Anderson and Prawle Point, 0·8 in: at Malin Head, 0·9 in: at Holyhead, and 1·3 ins: at Donaghadee.

SEA

Moderate to smooth generally, but rather rough at Lorient.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometer is at present rising generally, but a tendency still exists for the advance and development of shallow depressions over our Islands, and showers are likely to occur in many districts.

FORECASTS

For the 24 hours ending at NOON on 12th JULY 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	NE.ly to Variable breezes; fair generally.	6 SCOTLAND WEST	Same as No 1.
1 SCOTLAND EAST	Light Variable breezes; some rain at first but improving later.	7 ENGLAND N.W.	SW.ly winds, moderate or fresh; fair to showery.
2 ENGLAND N.E	SW.ly and W.ly winds, moderate; fine generally, but perhaps local showers.	8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		0 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.) Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	29·79	62	57	WNW 4	o	3
Sumburgh Head	29·84	54	51	NE 3	c	3
Stornoway ...	29·77	53	53	NE 5	o	5
Aberdeen ...	29·77	53	52	NE 4	o q p	3
Shields	29·61	59	59	E 3	f	3
Ardrossan ...	29·60	59	57	NE 3	o	2
Malin Head ...	29·57	57	56	ESE 4	o	3
Mullaghmore ...	29·58	61	58	WSW 2	o m	2
Belmullet ...	29·61	62	57	W 2	o	*

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Holyhead ...	29·55	60	60	S 0	r q m	0
Valencia	29·68	64	57	WNW 2	b c v	2
Scilly	29·69	62	59	W 5	b	4
Jersey	29·72	65	60	WSW 6	b c	5
Dungeness ...	29·69	65	63	SSW 3	c p	3
London	29·62	69	64	SE 3	c p	*
Yarmouth ...	29·71	63	62	SSE 5	r	4
Rochefort ...	29·94	79	69	WSW 5	b	3

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The report for yesterday morning showed that pressure was highest, 30·1 ins: and upwards, in a small anticyclone lying off the west of Italy, and lowest 29·6 ins: and less, in two large areas lying respectively over the west of our Islands and over Lapland. The wind was light from the SE.ᵗʰ over England and the greater part of France and from the E.ᵗʰ in Scotland and the north of Ireland. Over Portugal, Germany, and the Baltic, however, SW.ᵗʰ breezes were reported while over northern, Eastern, and southern Europe the wind was exceedingly variable. Rain was falling in many parts of the United Kingdom, as well as at Christiansund and Cuxhaven, but elsewhere the weather was mostly fine. A thunderstorm was, however, reported at Algiers. Temperature had changed rather irregularly, but the general tendency was for a slight rise; readings ranged from between 70° and 80° at most of the Mediterranean stations, and from a little above 70° in some parts of Germany to a little below 55° in the north of Scotland, and to slightly below 50° in the northwest of Norway. The highest individual readings were 87° at Algiers, 85° at Bilbao, 80° at Cagliari, 79° at Thiele and Lafelle, 77° at Brindisi and Constantinople, 76° at Sanguinaire, and 75° at Biarritz, Malta, and Sfax; the lowest were 48° at Bodö, 50° at Christiansund, 51° at Parsonstown, 52° at Sumburgh Head, 53° at Nairn, Aberdeen, 54° at Stornoway and Malin Head, 55° at Wick and 56° at Haparanda, Hernösand, Leith, Donaghadee, Roches Point and Scilly.

In the course of the day the low pressure system over our western coasts moved steadily northeastwards, and heavy rain fell in many parts of the United Kingdom. In the west and south, however, the wind veered to the W.ᵗʰ and blew strongly in the southeast of England, while the weather showed some improvement.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

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DAILY WEATHER REPORT.

for FRIDAY 12TH JULY *1889.*

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.									PAST 24 HOURS.		
				WIND.			BAROMETER.		SHADE TEMP.			WIND.				SHADE TEMP.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	Direc.	Force. (0 to 12.)	Weather.	Reading at 32° F and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	Max.	Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.55	56	NNE	4	o	29.53	−.17	49	49	−6	ENE	6	r	*	63	?	0.04
	Hernösand ...	29.49	53	NE	6	r	29.55	−.03	52	48	−3	NNW	6	c	*	61	52	0.04
	Stockholm ...	29.48	62	WSW	2	o	29.63	+.11	59	53	−8	W	2	o	*	70	52	0.12
	Wisby	29.63	63	SW	8	bc	29.74	+.10	56	51	−8	W	8	c	*	79	?	—
	Bodö	29.68	53	NNE	2	b	29.72	−.01	51	49	+1	SW	2	c	1	?	46	—
	Christiansund...	29.76	54	NNW	4	c	29.87	+.18	52	48	0	NNW	3	c	3	55	46	0.08
	Skudesnaes ...	29.79	52	NNW	6	bc	29.91	+.35	52	48	−2	NW	6	b	4	59	48	—
	Christiania Fjord (Farder)	29.55	64	Z	0	bc	29.82	+.36	55	48	−4	NNE	5	b	3	64	54	—
	Skagen (The Scaw)	29.63	53	W	7	b	29.78	+.28	56	51	−4	NW	4	o	3	64	52	0.04
	Fanö	29.94	59	W	6	c	29.98	+.38	62	54	0	W	4	c	*	66	55	—
GERMANY.	Sumburgh Head	29.92	57	N	3	c	30.03	+.20	51	50	+1	N	2	o	3	54	46	0.01
	Stornoway ..	29.99	53	NE	3	b	30.05	+.15	54	51	+3	NE	2	bc	2	55	41	—
	Wick	29.99	53	NE	1	c	30.07	+.18	58	54	+5	SE	1	bc	1	58	36	0.02
	Nairn	29.78	55	NE	1	bc	30.04	+.17	55	52	+4	Z	0	b	1	59	42	—
	Aberdeen... ...	30.00	54	NNE	1	c	30.08	+.22	55	49	+5	E	1	bc	2	59	43	—
	Leith	29.99	50	E	2	r	30.06	+.26	51	49	−1	SE	1	o	*	54	48	0.28
	Shields	29.96	55	ENE	2	o	30.03	+.21	59	55	+3	ENE	2	c	3	59	51	0.03
	Spurn Head ...	29.94	62	NW	2	bc	30.02	+.18	58	56	−2	NE	3	o	3	68	55	—
	York	29.95	67	W	4	b	30.05	+.22	55	50	−6	N	1	o	*	70	51	—
	Loughborough	29.96	70	WSW	1	bc	30.02	+.12	61	59	−1	ESE	1	om	*	72	59	0.01
BRITISH ISLANDS.	Ardrossan ...	29.93	53	NE	1	om	30.03	+.21	53	51	0	NE	3	om	2	56	49	0.20
	Malin Head ...	29.92	55	ENE	2	o	29.99	+.19	56	54	+3	ENE	4	bm	3	56	53	0.18
	Mullaghmore ...	29.91	63	NW	2	b	29.98	+.17	62	59	+3	ENE	1	b	1	65	51	—
	Belmullet ...	29.92	63	W	1	b	29.99	+.18	60	58	−1	S	1	b	*	65	46	—
	Donaghadee ...	29.93	61	N	2	b	30.02	+.22	56	55	−1	NNE	2	r	0	66	55	—
	Barrow-in-Furness	29.94	61	SW	3	b	30.00	+.21	55	53	−3	NE	2	b	*	61	50	—
	Liverpool (Bidston)	29.96	66	NW	1	b	30.02	+.14	62	55	+2	E	1	o	2	67	55	—
	Holyhead ...	29.96	60	SSW	2	b	30.02	+.14	60	57	+2	Z	0	c r	0	64	52	0.01
	Parsonstown ...	29.91	65	Z	0	c	29.99	+.13	60	56	+2	Z	0	b	*	70	47	—
	Valencia	29.93	62	S	3	bcr	29.97	+.11	64	58	+6	ENE	1	c	1	64	49	—
	Roche's Point...	29.96	63	SSW	3	b	29.98	+.11	65	60	+3	ESE	2	b	3	67	51	—
	Pembroke ...	29.98	61	SW	1	bc	30.00	+.09	62	58	+2	NE	1	b	1	64	57	—
	Scilly	29.97	63	SSW	3	bc	29.98	+.07	61	60	−4	SSE	1	c	2	67	57	—
	Prawle Point ...	29.97	59	E	1	c	30.00	+.04	62	59	+5	ENE	2	c	1	62	50	0.06
	Jersey	30.00	67	SSE	3	ogr	30.00	+.01	62	59	−1	NNW	2	cgm	2	70	57	—
	Hurst Castle ...	30.00	63	SSW	2	c	29.99	0.0	64	62	+1	ESE	1	c	1	68	60	—
	Dungeness ...	30.01	64	SSW	2	b	29.97	+.01	61	61	−1	E	2	c	1	70	60	0.10
	London	30.00	68	S	2	c	29.99	+.03	63	61	0	SE	1	om	*	72	59	0.04
	Oxford	29.99	63	S	1	r	29.99	+.04	62	60	+2	SSW	1	bc	*	69	54	0.02
	Cambridge ...	30.00	67	SW	1	c	30.00	+.07	65	63	+3	SW	1	o	*	74	54	—
	Yarmouth ...	29.97	69	SSW	3	b	29.99	+.10	64	62	+2	SW	1	b	2	72	60	—
GERMANY.	Cuxhaven ...	29.95	64	WNW	5	c	30.01	+.25	65	63	0	WSW	2	c	*	70	64	—
	Berlin	30.00	75	WNW	3	c	30.06	+.13	68	60	−8	W	2	c	*	86	63	—
	Wiesbaden ...	*	*	*	*	*	30.04	+.02	68	66	−6	SW	2	b	*	79	64	0.24
	Munich	30.11	76	NW	1	b	30.11	−.07	76	71	+2	SW	4	b	*	86	64	0.12
FRANCE & NETHERLANDS.	The Helder ...	30.02	65	WSW	1	bc	30.01	+.15	64	61	+2	SW	1	c	1	68	59	—
	Brussels	*	*	*	*	*	30.00	−.02	66	62	+4	ENE	1	o	*	75	60	0.04
	Cape Gris Nez...	?	?	?	2		?	?	61	60	+1	NE	3	o	2	68	59	—
	Paris	30.02	75	S	1	o	30.00	−.04	66	66	+4	N	1	o	*	80	64	0.12
	Brest	?	64	Z	0	c	?	?	59	55	−3	ENE	1	o	1	64	52	0.12
	Lorient	30.03	60	SW	1	o	30.00	+.01	59	59	−4	E	1	o	2	68	57	0.04
	Rochefort ...	30.01	70	NW	3	o	30.02	−.03	69	69	+2	SE	1	c	2	82	63	1.14
	Belfort														*			
	Lyons	29.99	84	SSW	3	b	?	?	71	62	+1	?	2	b	*	89	64	—
	Nice...	30.11	78	W	3	b	30.09	−.03	76	63	+3	SE	1	b	0	84	66	—
	Perpignan ...	30.02	72	E	4	o	30.05	−.01	72	70	+4	E	2	c	*	77	68	—
	Biarritz	29.91	86	ENE	4	b	30.02	+.01	68	67	−1	WNW	3	o	1	90	66	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.09	68	SW	4	r	30.14	+.10	66	63	−2	NNW	1	bc	5	73	64	—

For Explanation of Columns, see p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Friday, 12th July, 1889.

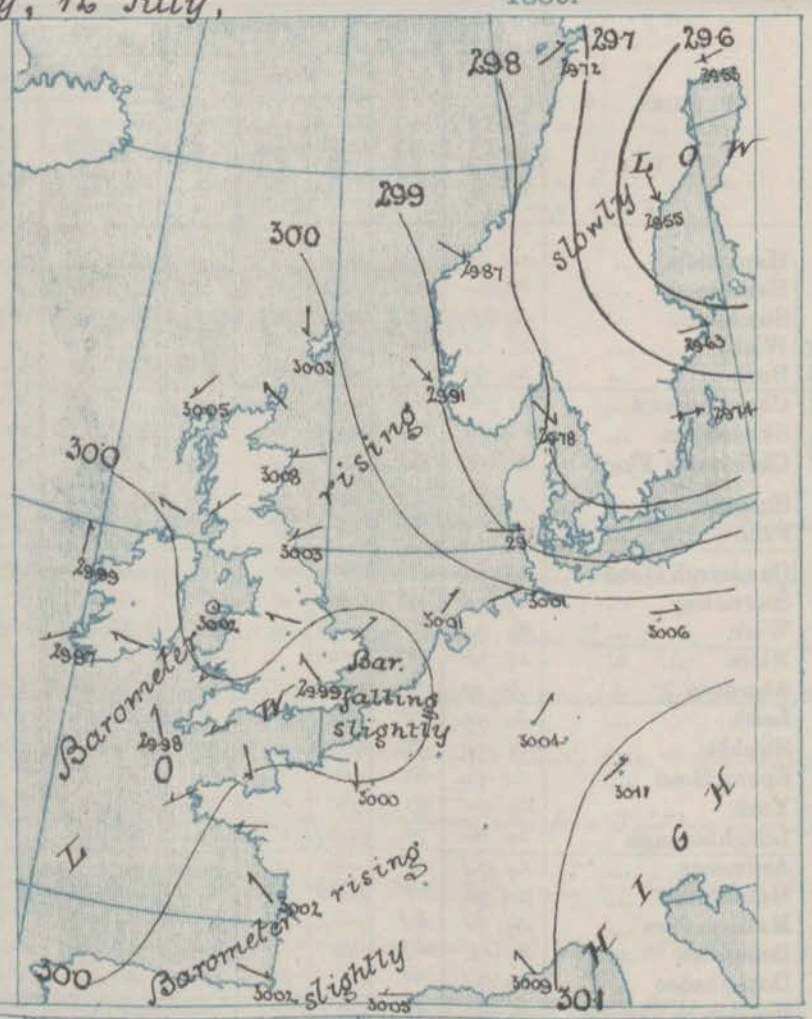
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE – Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

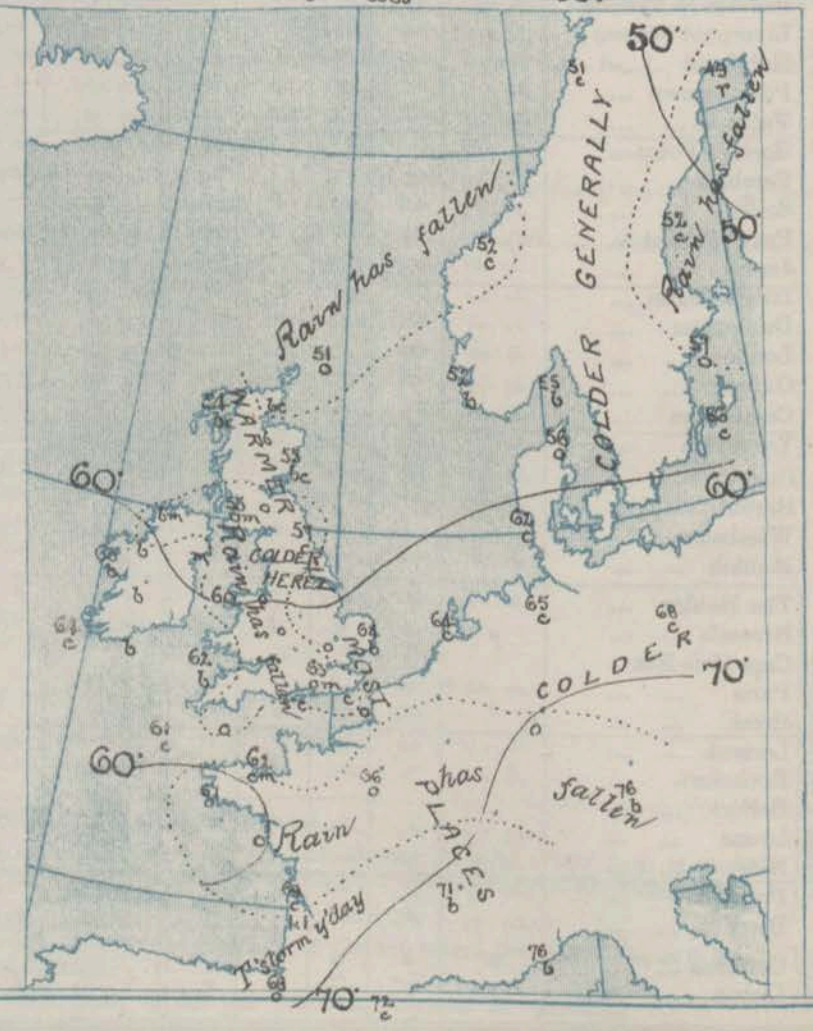
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL – A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 0	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 0	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE — Highest, 30·1 ins. and upwards, over the south of Portugal and also over Switzerland and South Germany. Lowest, 29·6 ins. and less, over the Gulf of Bothnia — A shallow depression has advanced from France to the southeast of England. Gradients slight generally. Barometer falling slightly in the Netherlands, the southeast of England and the northeast of France, but rising elsewhere.

TEMPERATURE — Highest, 76° at Munich and Nice, 72° at Perpignan, 71° at Lyons, 70° at Wiesbaden, 69° at Rochefort, and 68° at Berlin and Biarritz. Lowest, 49° at Haparanda, 51° at Lerwick Head and Leith, 52° at Thorshavn, Christiansund and Skudesnaes, and 53° at Andreasan. The thermometer exceeded 80° yesterday at several of the French and German stations, the highest reading reported being 90° at Biarritz.

WIND — Light from the E.ly or NE.ly over the greater part of our Islands, but variable in the southeast of England and also in France. Strong from the NW.ly at some of the Scandinavian stations, moderate from W. or SW. in Denmark and Germany.

WEATHER — Fair generally, but dull in several parts of England and France. Since yesterday morning showers have fallen in many parts of our area, and thunder and lightning have occurred in the southwest of France.

SEA — Slight or smooth generally.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The shallow depression off the southeast of England may possibly move northwards and occasion thundery unsettled weather at our eastern and central stations. In the west and north the weather is likely to remain fair for the present.

FORECASTS

For the 24 hours ending at NOON on 13th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	E.ly and NE.ly winds, light; fair generally.
1 SCOTLAND EAST	E.ly and NE.ly winds, light; fair to unsettled and some rain, thunder locally.
2 ENGLAND N.E	
3 ENGLAND EAST	Light Variable breezes; changeable, some rain, thunder locally.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	Same as No 0
7 ENGLAND N.W.	Same as No 1 and 2
8 ENGLAND S.W.	Variable or SE.ly breezes; changeable, some showers, thunder locally
9 IRELAND NORTH	Light breezes, chiefly SE.ly; fair generally
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesmues ...	29.67	57	50	NNW	8	b	u
Sumburgh Head	29.89	52	50	N	3	c	4
Stornoway ...	29.98	53	52	E.	3	o	3
Aberdeen ...	29.96	55	48	N	2	o	4
Shields	29.91	54	53	NE	1	d	3
Ardrossan ...	29.90	56	55	NE	1	r	1
Malin Head ...	29.89	55	55	E	0	o	1
Mullaghmore ...	29.88	64	59	WNW	2	bv	1
Belmullet ...	29.90	65	57	WSW	2	e	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	29.95	64	57	SSW	3	b	3
Valencia	29.91	63	56	SSE	3	bcv	3
Scilly	29.96	66	62	SSE	3	bc	4
Jersey	29.98	69	65	SE	3	cg	3
Dungeness ...	30.01	66	60	WSW	4	bc	3
London	29.99	71	61	SW	3	c	*
Yarmouth ...	29.95	72	63	W	4	b	2
Rochefort ...	30.04	74	69	NW	3	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure varied from between 30.0 ins: and nearly 30.2 ins: over Central, Southern, and Southeastern Europe, and from 29.8 ins: and more to the northwestward of our Islands, to 29.8 ins: and less, off the west of Ireland, and to 29.5 ins: and less, in a depression lying over the south of Sweden — to which position it had apparently advanced from the north of England during the preceding night. The wind was variable over the southwestern, central, and southeastern parts of the Continent, SW. over England, the north of France, the Netherlands, and North Germany, and S. both over the Baltic and Ireland. In Norway and the extreme north of Scotland it was NE. The weather was fine in the region where pressure was highest, very variable elsewhere, with rain over the northwest of Spain, the north of our Islands and at many of the Baltic stations. Temperature had risen over Central and Southern Europe, changed little and irregularly elsewhere. The highest morning values were 81° at Constantinople, 80° at Sanguinaria, Palma, and Trieste, 79° at Lafalle, 78° at Breslau, 77° at Oran Algiers, Sfax, and Brindisi, 76° at Barcelona, Rome and Berlin, and 70° to 75° at many other southern, southeastern and central stations. The lowest were 50° at Bodö, Lerwick, and Aberdeen, 51° at Stornoway and Nairn, 52° at Christiansund and Leith, 53° at Ardrossan and Malin Head, 54° at Shields and 55° in the north of Sweden.

Later in the day fair weather prevailed in most part of the British Islands, but showers occurred in some localities, and heavy rain at Rochefort. Temperature rose to between 70° and 74° over England, to 80° at Paris and to 86° at Berlin.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Saturday, 13th July, 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.60	45	N	2	r	29.68	+.15	46	42	-3	N	4	o	*	55	43	0.28
	Hernösand ...	29.71	51	N	2	c	29.75	+.20	54	49	+2	N	2	c	*	59	48	0.04
	Stockholm ...	29.74	59	N	2	o	29.63	+.20	56	50	-.1	WNW	2	b	*	66	52	-
	Wisby	29.80	58	W	4	bc	29.88	+.14	59	53	+3	N	2	b	*	70	54	-
	Bodö	29.77	47	N	2	b	29.86	+.14	51	46	0	N	2	c	1	57	?	-
	Christiansund...	29.96	53	NW	4	c	30.00	+.13	50	47	-2	SW	4	f b	2	55	46	0.35
	Skudesnaes ...	30.01	51	NW	6	b	30.02	+.11	53	46	+1	NW	4	bc	3	?	43	-
	Christiania Fjord (Farder)	29.83	60	WSW	5	b	29.92	+.10	56	49	+1	SSE	4	c	2	61	55	-
	Skagen (The Scaw)	29.86	54	SW	1	b	29.84	+.06	59	56	+3	W	2	b	1	64	50	-
	Fanö	30.02	53	NW	2	b	30.02	+.04	60	52	-2	NW	4	b	*	64	50	-
BRITISH ISLANDS.	Sumburgh Head	30.06	53	NNW	1	b	30.00	-.03	55	51	+4	E	1	c	2	55	43	-
	Stornoway ..	30.03	55	NE	3	b	29.94	-.11	55	54	+1	S	0	o	2	57	50	-
	Wick	30.07	56	SE	1	bc	? 30.01	-.06	59	56	+1	S	2	bc	1	62	46	-
	Nairn	30.01	58	NNE	2	b	29.96	-.08	57	55	+2	S	0	b	1	61	46	-
	Aberdeen... ...	30.08	54	SSE	2	bc	30.00	-.08	59	54	+4	SSE	2	b	2	60	50	-
	Leith ...	30.05	56	E	1	o	30.01	-.05	60	56	+9	E	1	b	*	60	49	-
	Shields	30.05	58	ENE	3	c	30.01	-.02	59	56	+2	S	3	c	3	60	53	-
	Spurn Head ...	30.04	58	NE	3	b	29.99	-.03	57	55	-1	ENE	5	o	4	65	55	-
	York	30.04	64	E	1	o	?	?	59	56	+4	E	2	o	*	73	53	-
	Loughborough	30.00	68	ENE	2	c	29.97	-.05	60	58	-1	E	1	o pd	*	76	59	0.01
	Ardrossan ...	30.02	62	NE	1	cmo	29.99	-.04	57	55	+4	NW	1	o m	1	65	51	-
	Malin Head ...	30.00	59	E	3	om	29.98	-.01	58	57	+2	WSW	2	c f	1	60	54	-
	Mullaghmore ...	29.99	63	NW	2	c.	29.99	+.01	60	56	-2	WNW	2	c	2	66	56	0.01
	Belmullet ...	30.01	60	NW	1	bc	30.02	+.03	57	53	-3	NW	2	o	*	66	52	-
	Donaghadee ...	30.03	60	E	2	m	29.99	-.03	57	56	+1	E	2	f b	0	61	52	-
	Barrow-in-Furness	29.99	68	N	2	o	29.98	-.02	59	56	+4	NE	4	o	*	67	55	-
	Liverpool (Bidston)	30.00	62	N	1	o	29.98	-.04	59	56	-3	E	2	r	3	67	55	0.10
	Holyhead ...	30.01	58	S	0	pq	29.96	-.06	58	59	-2	S	0	cm	0	64	54	-
	Parsonstown ...	29.98	64	S	0	o	30.02	+.03	52	52	-8	S	0	f	*	73	45	-
	Valencia	30.00	62	N	1	cp	30.01	+.04	62	58	-2	N	1	bm	1	65	49	0.23
	Roche's Point...	30.01	65	SSE	2	b	30.00	+.02	64	58	-1	NNW	1	b	2	69	53	-
	Pembroke ...	30.00	60	NW	1	bc	29.99	-.03	58	56	-4	NW	2	c	1	63	56	-
	Scilly	30.00	62	SSE	1	c	29.95	-.03	64	62	+3	ESE	3	c	3	67	56	0.13
	Prawle Point ...	29.98	63	W	3	b	29.98	-.02	59	58	-3	WSW	3	bc	1	65	55	-
	Jersey	30.01	61	NW	3	omqr	30.02	+.02	59	56	-3	W	3	oq	3	68	57	0.14
	Hurst Castle ...	29.99	63	SW	2	c	29.96	-.03	59	58	-5	SW	2	od	1	71	58	0.14
	Dungeness ...	29.97	64	ENE	3	bc	29.93	-.04	61	60	0	SW	2	bc	2	69	59	-
	London	29.96	69	SE	2	bc	29.93	-.06	65	62	+2	S	1	c	*	76	61	0.14
	Oxford	29.97	65	NNE	2	c	29.93	-.06	60	59	-2	E	1	o	*	74	58	0.58
	Cambridge ...	30.00	67	S	1	klr	29.93	-.04	60	60	-5	S	0	r	*	73	57	2.15
	Yarmouth ...	30.00	65	ESE	1	cv	29.98	-.01	61	60	-3	E	5	c	4	68	58	0.03
GERMANY.	Cuxhaven ...	30.02	61	N	4	c	30.04	+.03	60	57	-5	NE	3	c	*	68	59	-
	Berlin	29.97	71	N	2	r	29.98	-.08	65	59	-3	NE	1	o	*	79	63	-
	Wiesbaden ...	*	*	*	*	*	30.01	-.03	69	66	+1	SW	2	bc	*	82	64	0.51
	Munich	30.04	71	E	1	b	30.11	.00	72	68	-4	SW	2	bc	*	86	61	0.75
FRANCE & NETHERLANDS.	The Helder ...	30.01	64	NE	2	b	30.01	.00	62	56	-2	E	2	bc	3	68	61	-
	Brussels .. ... 9 AM	*	*	*	*	*	29.99	-.03	64	63	-2	NNE	1	p	*	75	59	0.71
	Cape Gris Nez...	30.00	68	ENE	1	b	?	?	64	63	+3	S	1	f	0	70	?	-
	Paris	29.98	77	WSW	2	bc	30.03	+.03	62	60	-4	SW	2	o	*	83	59	0.12
	Brest	?	61	NNW	2	o	?	?	60	58	+3	W	3	o	2	63	54	-
	Lorient	30.02	60	WNW	5	c	30.05	+.05	61	58	+2	SW	2	bc	3	64	54	0.04
	Rochefort ...	30.11	67	WNW	4	c	30.12	+.10	63	60	-6	NE	1	c	2	77	55	-
	Belfort	30.00	75	W	1	bc	30.00	-.04	65	56	-12	W	1	b	*	81	63	-
	Lyons	30.04	81	WSW	1	bc	30.01	?	72	69	+1	WNW	1	b	*	92	69	-
	Nice...	30.04	76	SSW	4	b	30.02	-.07	73	70	-3	NE	1	bc	0	84	63	-
	Perpignan ...	30.01	80	E	1	b	30.01	-.04	74	70	+2	E	2	b	*	84	64	-
	Biarritz	30.12	69	SW	3	o	30.06	+.04	66	64	-2	N	4	o	2	77	64	0.16
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.15	66	NW	4	b	30.19	+.05	64	65	-2	N	3	b	2	75	59	-

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Saturday, 13th July, 1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

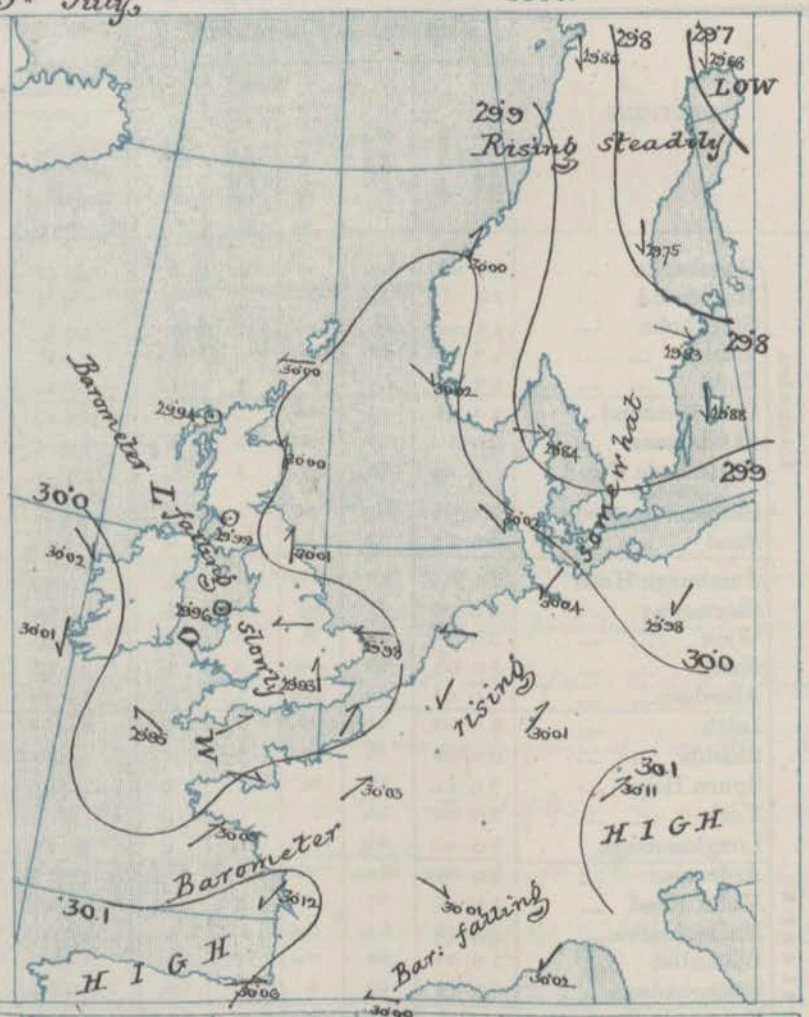
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 824
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

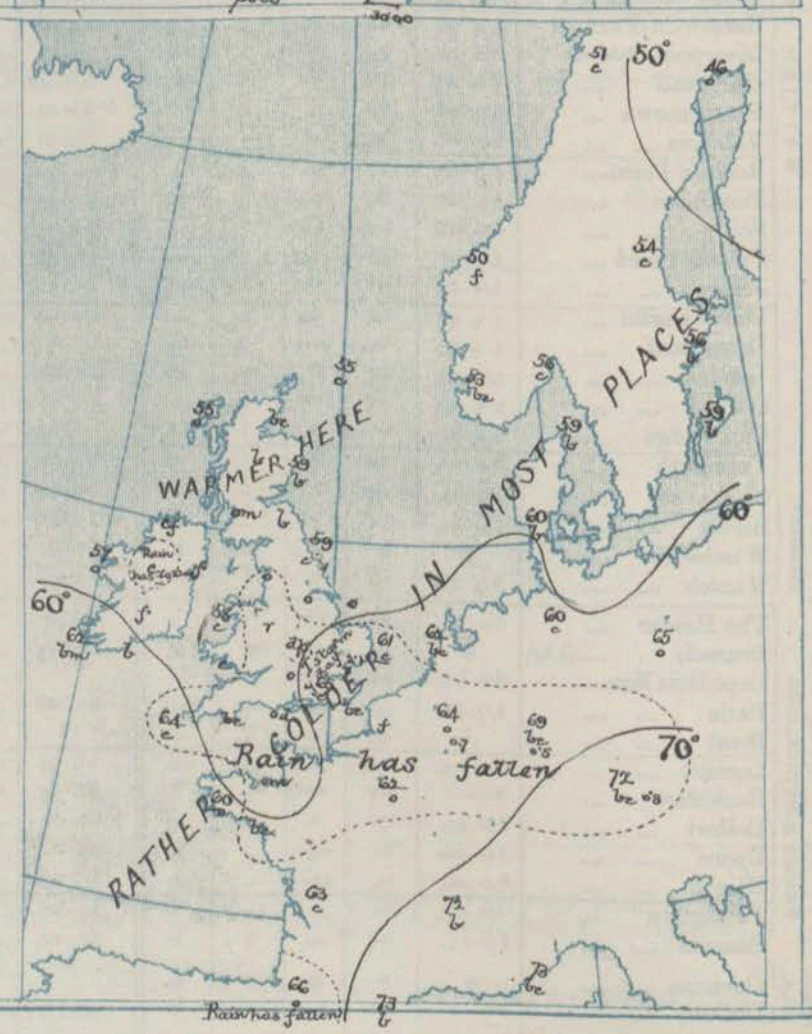
RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE — Highest, 30·1 in: and upwards, over Spain and the southern parts of the Bay of Biscay, as well as in South Germany. Lowest, 29·7 in: and less, in the north of Sweden. A large and irregularly formed area of low reading (30·0 in: and less) is lying over the greater part of the United Kingdom. Gradients slight. Barometer falling a little in Great Britain and also in the south of France, but rising elsewhere.

TEMPERATURE — Highest, 74° at Perpignan, 73° at Nice, 72° at Munich and Lyons, 69° at Wiesbaden, 66° at Biarritz, and 65° in London and at Berlin. Lowest, 46° at Haparanda, 50° at Christiansund, 51° at Bodö, 52° at Parsontown, 53° at Skudesnas, and 54° at Hernösand. The highest maximum registered over our Islands yesterday was 76° in London and at Loughborough, but at Munich the thermometer rose to 86° and at Lyons to 92°.

WIND — Light from the NW.ᵗʰ in Ireland, and from SW. in the south of England and the north of France. Fresh from the E.ᵗʰ on the east coast of England, light from the S.ᵗʰ in the east of Scotland. Moderate from the N.ᵗʰ in Sweden, variable in Germany and the south of France.

WEATHER — Fine generally, but rainy over the central parts of England, and foggy at some of the Irish stations as well as at Christiansund & Greenock. Thunderstorms have occurred in the east and southeast of England; at Cambridge the accompanying rainfall has been as much as 2·2 ins:.

SEA — Moderate off the east of England, but slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

A tendency still exists for the formation of small shallow depressions over various parts of the United Kingdom, and changeable showery weather is likely to continue for a time, with thunder in places.

FORECASTS

For the 24 hours ending at NOON on 14ᵗʰ JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	SE.ᵗʰ and E.ᵗʰ winds, light; fine to unsettled and some rain, possibly thunder.
2 ENGLAND N.E 3 ENGLAND EAST	E.ᵗʰ winds, light or moderate; unsettled, some rain thunder locally.
4 MIDLAND COUNTIES 5 ENGLAND SOUTH	SW.ᵗʰ and S.ᵗʰ winds, light; changeable, some showers, thunder locally.
6 SCOTLAND WEST 7 ENGLAND N.W.	Light variable breezes; unsettled, some rain, possibly thunder.
8 ENGLAND S.W.	Variable breezes, finally NW.ᵗʰ; changeable, some showers, thunder locally.
9 IRELAND NORTH 0 IRELAND SOUTH	Light breezes, chiefly NW.ᵗʰ; fair generally, but local showers.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	29.97	56	49	NNW 8	b	4
Sumburgh Head	30.06	54	50	NNW 2	c	3
Stornoway ...	30.04	57	54	NE 3	b	3
Aberdeen ...	30.09	57	51	SE 2	bc	2
Shields	30.05	58	56	ENE 3	c	3
Ardrossan ...	30.03	64	59	S 0	bc	0
Malin Head ...	30.00	59	57	ESE 4	c	3
Mullaghmore ...	29.99	63	59	S 0	c f	1
Belmullet ...	30.02	63	58	NW 1	b	*

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Holyhead ...	30.03	59	57	NNW 1	c q	2
Valencia	30.00	59	58	N 2	o f	2
Scilly	30.00	65	63	ESE 2	c	1
Jersey	30.01	62	63	NW 3	c	3
Dungeness ...	29.97	67	63	ENE 3	c	2
London	29.97	70	64	ESE 1	o	*
Yarmouth ...	29.99	68	66	SE 2	b	2
Rochefort ...	30.09	74	69	WNW 4	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The report for yesterday morning showed that pressure varied from between 30·0 in: and 30·1 in:, over the whole of central, southwestern, and southeastern Europe, and from rather above 30·0 in: over the northern half of Great Britain to 29·4 in: and less, in a large depression lying over Finland, and to rather below 30·0 in: in a series of shallow and ill-defined disturbances lying over the western and southern parts of our Islands and the northeast of France. The wind was strong from NE. and N. over the Gulf of Bothnia, fresh to a gale from W. over the Baltic, light from W. over Germany, moderate from SW. over Finland and the northern half of Russia. In the United Kingdom it was light and variable from between E. and S., while over Spain, France and Austria it was very light and variable. The weather was fine over the greater part of the Continent and also in the north and northwest of our Islands, but dull and rainy over Finland, northern, and central Russia — fair but with a changeable showery appearance in the southwest and south of the British Islands, and the north and east of France. Temperature had fallen considerably over Denmark, the Baltic and North Germany, but remained high over Algeria, the Mediterranean, Austria, and Southwestern Russia. The highest morning values were 83° at Tricala, 82° at Cagliari, 81° at Lisbon, 80° at Constantinople, 79° at Brindisi and Lesina, 78° at Lesina, Pesaro and Sanguinaire, 77° at Palermo and Buda Pesth, 76° at Algiers, Malta, Nice, and Cracow, 75° at Barcelona, Sfax, Lemberg and Kiev, and 71° at Prague and Breslau. The lowest were 48° at Ulleaborg, 49° at Haparanda, 51° at Bodö, Sumburgh Head, and Leith, 52° at Hernosand, Christiansund and Skudesnaes, 53° at Ardrossan, and 55° at Barrow in Furness and York.

During the day the air was very close over England and severe thundershowers fell at times in many parts of our southern and eastern counties (at Cambridge the rainfall exceeded 2 in:). In the north of our Island the weather was fair.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Sunday 14th July *1889*

Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 8.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.82	49	N	2	c	29.89	+ .15	53	47	+ 7	2	0	0	*	59	41	—
	Hernösand ...	29.86	54	NNW	1	c	29.91	+ .16	55	51	+ 1	NW	1	b	*	55	48	0.12
	Stockholm ...	29.88	56	ESE	2	0	29.90	+ .07	64	55	+ 8	ESE	2	b	*	64	46	—
	Wisby	29.92	59	S	4	0	29.88	.00	61	58	+ 2	W	4	b	*	68	55	—
	Bodö	29.92	49	NNE	2	c	29.95	+ .09	49	43	— 2	NNE	2	b	1	52	45	—
	Christiansund...	29.97	54	ENE	6	b	29.87	— .13	54	49	+ 4	ENE	4	b	2	54	46	—
	Skudesnaes ...	29.98	51	NW	4	b	29.84	— .18	55	49	+ 2	ESE	2	c	2	59	45	—
	Christiania Fjord (Faerder)	?	67	NE	1	b	29.87	— .05	61	52	+ 5	ENE	3	b	2	70	?	—
	Skagen (The Scaw)	29.86	54	N	1	b	29.82	— .02	63	58	+ 4	SE	2	c	1	70	50	—
	Fanö	29.92	57	N	2	b	29.87	— .21	54	50	— 6	N	4	c	*	64	48	—
BRITISH ISLANDS.	Sumburgh Head	29.89	55	SE	2	o	29.75	— .25	54	53	— 1	W	1	c	1	59	50	0.18
	Stornoway ..	29.89	55	W	3	o	29.76	— .18	53	51	— 2	W	3	bc	3	59	41	0.02
	Wick	29.85	56	2	0	r	29.79	— .22	58	55	— 1	NW	1	c	1	62	47	0.07
	Nairn	29.89	65	E	1	o	29.80	— .16	57	55	0	SW	1	bcp	1	66	49	0.07
	Aberdeen... ...	29.90	56	S	2	o	29.80	— .18	58	50	— 6	N	1	o	1	64	53	0.08
	Leith	29.87	64	E	1	b	29.84	— .17	59	56	— 1	W	2	c	*	64	49	—
	Shields	29.92	59	SE	3	bc	29.84	— .17	55	54	— 4	NW	2	c	2	61	51	0.12
	Spurn Head ...	29.91	55	E	2	r	29.86	— .13	60	57	+ 3	N	1	bc	3	66	54	0.26
	York	29.93	61	E	2	c	29.88	?	58	55	— 1	NNW	1	c	*	64	49	—
	Loughborough	29.88	60	E	3	o	29.88	— .09	58	57	— 2	NNE	2	o	*	61	54	0.37
	Ardrossan ...	29.89	60	NW	1	om	29.87	— .12	57	54	0	W	4	o	3	66	49	—
	Malin Head ...	29.95	58	NW	3	c	29.88	— .10	54	51	— 4	NW	3	obp	3	61	51	—
	Mullaghmore ...	29.99	58	WNW	5	bv	29.94	— .05	56	51	— 4	WNW	5	o	3	66	56	0.01
	Belmullet ...	30.02	58	WNW	2	o	29.98	— .04	55	50	— 2	WNW	3	o	*	61	53	0.06
	Donaghadee ...	29.93	58	NE	4	bc	29.92	— .07	57	54	0	WNW	3	c	2	63	55	0.01
	Barrow-in-Furness	29.90	63	E	4	c	29.88	— .10	57	54	— 2	NNW	3	o	*	65	56	—
	Liverpool (Bidston)	29.90	58	ENE	2	o	29.91	— .07	56	53	— 1	NW	3	o	4	60	56	0.14
	Holyhead ...	29.89	62	ENE	2	c	29.93	— .03	58	52	0	NNE	3	b	2	68	54	—
	Parsonstown ...	29.95	67	NW	2	bc	29.99	— .08	54	52	+ 2	2	0	0	*	71	45	—
	Valencia	30.01	61	NNW	3	bq	30.05	+ .04	60	55	— 2	WNW	2	c	2	65	52	—
	Roche's Point...	29.97	60	SW	2	r	30.02	+ .02	58	55	— 6	NW	3	c	3	66	51	0.30
	Pembroke ...	29.91	59	W	3	c	29.96	— .01	58	55	0	NNW	4	bc	2	62	55	—
	Scilly	29.94	63	NNW	1	bc	29.99	+ .04	62	59	— 2	NNW	3	c	3	66	58	0.03
	Prawle Point ...	29.92	59	WNW	2	c	29.91	— .07	63	60	+ 4	NW	3	bcm	1	63	54	0.31
	Jersey	29.95	62	SW	2	o	29.92	— .10	60	59	+ 1	WNW	5	ogmr	4	67	56	0.36
	Hurst Castle ...	29.88	61	WSW	5	bc	29.86	— .10	59	59	0	NW	2	od	2	67	58	0.04
	Dungeness ...	29.86	62	WSW	4	c	29.87	— .12	60	58	— 1	WSW	5	o	4	69	58	—
	London	29.85	65	SW	2	o	29.87	— .12	61	58	— 4	W	1	c	*	70	57	0.08
	Oxford	29.84	59	W	1	o	29.86	— .07	57	56	— 3	NNW	2	o	*	67	56	0.32
	Cambridge ...	29.84	62	E	1	b	29.83	— .10	59	58	— 1	N	1	r	*	71	57	0.69
GERMANY.	Yarmouth ...	29.86	59	NE	5	cg	29.87	— .17	57	56	— 4	NE	5	r	4	61	55	1.88
	Cuxhaven ...	29.93	57	NNE	4	o	29.80	— .24	59	57	— 1	ESE	2	o	*	62	57	0.22
	Berlin	29.87	70	2	0		29.79	— .19	65	62	0	NE	1	bc	*	77	59	0.71
	Wiesbaden ...	*	*	*	*	*	29.88	— .13	67	61	— 2	NW	1	c	*	77	61	0.04
	Munich	30.04	68	W	4	r	29.98	— .13	61	61	— 11	NW	1	o	*	82	59	1.18
FRANCE & NETHERLANDS.	The Helder ...	29.92	61	ENE	4	b	29.77	— .24	59	57	— 3	NE	2	r	3	66	59	0.39
	Brussels 9am	*	*	*	*	*	29.85	— .12	60	56	— 4	WSW	3	c	*	73	65	—
	Cape Gris Nez...	?	59	WSW	4	b	?	?	59	57	— 5	SW	4	o	4	66	57	—
	Paris	29.95	71	SW	2	bc	29.94	— .09	59	57	— 3	SW	1	r	*	76	54	0.04
	Brest	30.07	61	WSW	1	o	?	?	60	59	0	NW	2	b	4	64	55	—
	Lorient	29.99	63	WSW	4	bc	30.01	— .04	58	56	— 3	NW	3	b	2	68	55	—
	Rochefort ...	30.08	68	WNW	4	bc	30.09	— .03	63	59	0	NW	4	bc	2	72	54	—
	Belfort	29.94	72	W	1	o	29.94	— .06	63	52	— 2	W	1	o	*	77	60	0.20
	Lyons	29.97	68	SSE	1	o	30.02	+ .01	62	59	— 10	NNW	1	bc	*	89	60	1.18
	Nice...	29.94	72	SW	1	o	29.88	— .14	71	65	— 2	ENE	3	bc	0	82	64	—
	Perpignan ...	29.95	78	N	2	o	30.05	+ .04	66	58	— 8	NW	3	o	*	80	63	0.04
	Biarritz	30.10	65	NNW	5	o	30.15	+ .09	65	59	— 1	W	5	c	3	73	63	—
PENINSULA.	Corunna	*	*	*	*	*	30.23	+ .09	68	64	+ 3	SW	1	c	2	70	57	—
	Lisbon	30.19	65	NNW	4	b	30.17	— .02	63	58	— 1	N	5	b	2	73	59	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Sunday, 14th July, 1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

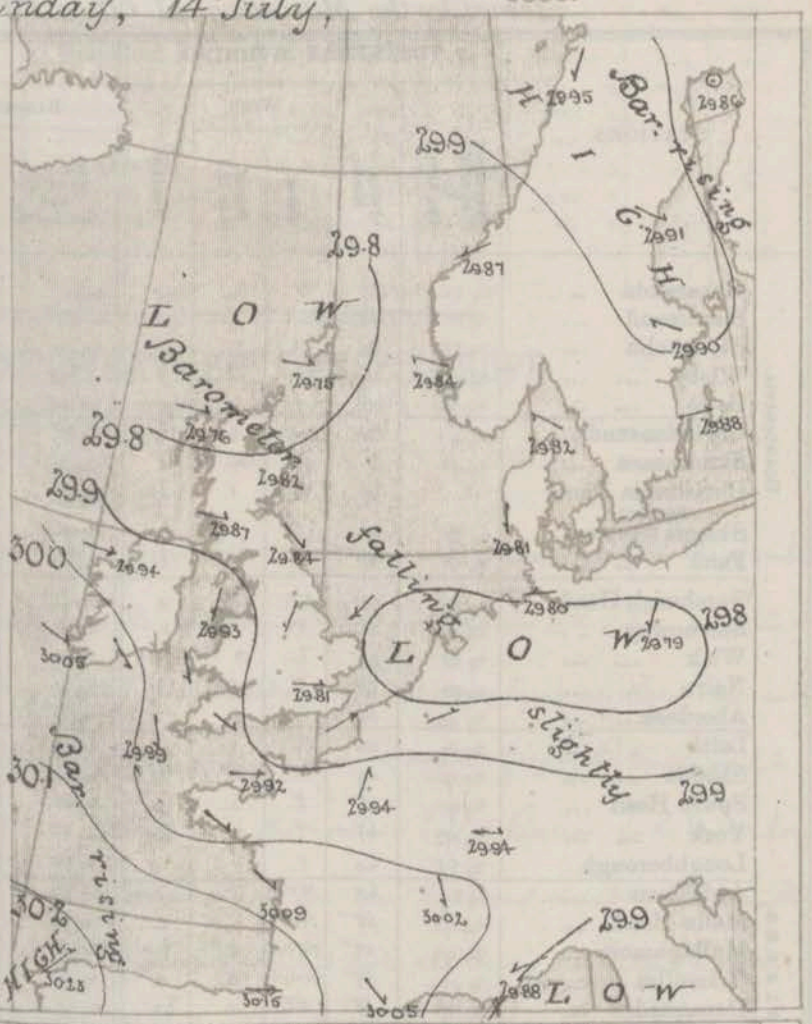
BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:

= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

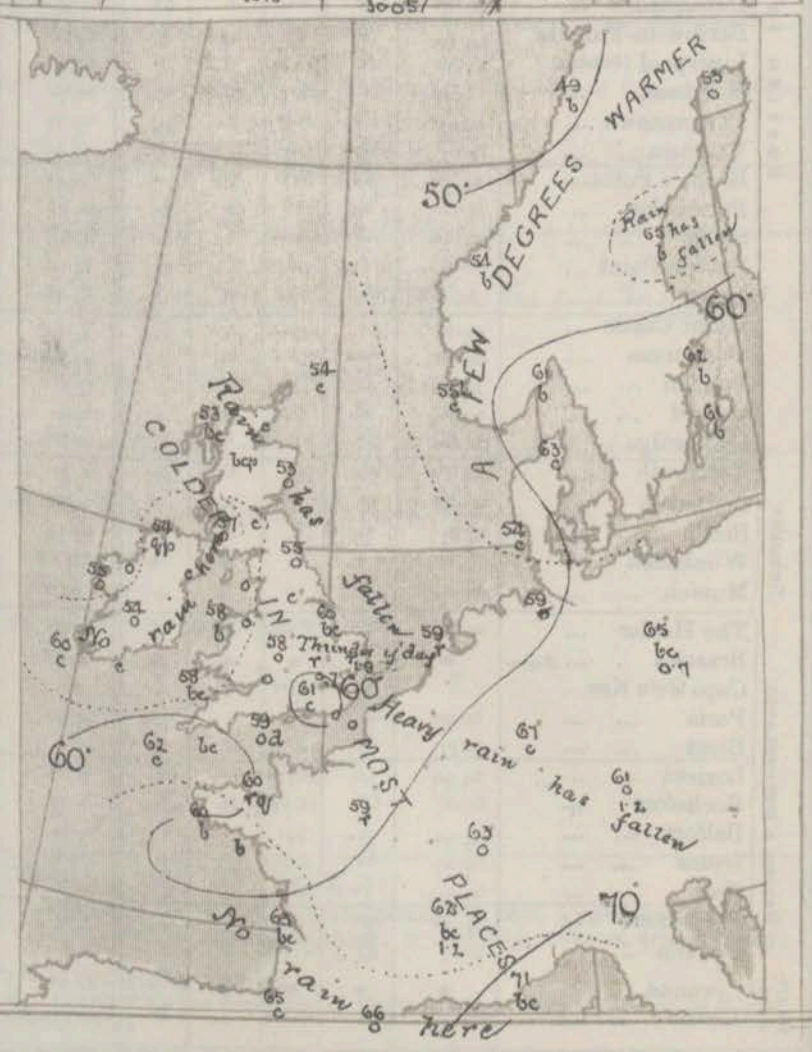
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	54 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 37
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·2 in: and upwards, in an anticyclone lying over the northwest of Spain.
Lowest, 29·8 in: and less, in a shallow depression lying off the north of Scotland, and also in another disturbance lying over Holland and N. Germany.
Gradients slight. Barometer rising in Sweden as well as in the southwest of our Islands and the west of France, but falling elsewhere.

TEMPERATURE

Highest, 71° at Nice, 68° at Corunna, 67° at Wiesbaden, 66° at Perpignan, and 65° at Berlin and Biarritz.
Lowest 49° at Bodö 53° at Haparanda, Stornoway, and Aberdeen, and 54° at Christiansund, Lumburgh Head, Malin Head and Parsonstown.
The highest maxima registered over our Islands yesterday were 91° at Parsonstown and Cambridge and 90° in London, but in the southern parts of France, Germany the thermometer exceeded 80°.

WIND

Light or moderate from the W.ward or NW.ward over the greater part of our Islands and France, but N. or NE. in the east of England.
Light from the E.ward on the eastern shores of the North Sea, but variable in Sweden.

WEATHER

Rainy in Holland and the east of England, and showery in the northern parts of our Islands.
Fair in most other localities, but misty at some of the Channel stations.
Thunderstorms occurred yesterday in many parts of England, France and Germany, with heavy rain in places.

SEA

Moderate to smooth.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 15th July 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	NONE ISSUED	6 SCOTLAND WEST	NONE ISSUED.
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		0 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	

Note.—The **South Cone**, *point downwards* (▽), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (△), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesnaes ...	30·00	57	49	NW	6	b	3
Sumburgh Head	29·94	56	54	SE	2	o	3
Stornoway ...	29·91	56	54	N	2	o	2
Aberdeen ...	29·94	58	55	S	2	or	2
Shields	29·96	60	56	ESE	3	c	3
Ardrossan ...	29·92	64	60	NW	1	c	1
Malin Head ...	29·97	61	57	NW	2	b	2
Mullaghmore ...	29·99	62	57	NNW	5	be	3
Belmullet ...	30·03	60	53	NW	1	b	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	29·91	65	62	ENE	1	be	1
Valencia	30·01	64	59	NNW	3	bm	2
Scilly	29·93	64	62	2	0	e	3
Jersey	29·98	67	60	SW	2	c	2
Dungeness ...	29·89	65	60	SW	4	b	3
London	29·88	67	61	SSW	2	o	*
Yarmouth ...	29·89	59	59	E	5	r	4
Rochefort ...	30·10	68	63	NNW	1	o	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30·1 ins. and upwards, over the eastern parts of the Iberian Peninsula and the southern parts of the Bay of Biscay, and high 30·0 ins. and upwards over the North Sea, North Germany and the southwest of Norway. The lowest readings, 29·4 ins. and less, were found over the north of Russia, but several small and very shallow depressions were lying over various part of the United Kingdom. The wind was generally light or moderate in force but very variable in direction. Over Sweden, the Baltic, and North Germany as well as in Ireland and Spain it was chiefly NW., and over the southern parts of England and Germany SW. In the north and East of England, however, light to fresh E. breezes were reported and in the east of Scotland light S. breezes, while over Italy, the Mediterranean, and the southern parts of Austria and Russia variable airs were reported. Thunder showers were reported over England, and fog in the north of Ireland, but elsewhere the weather, though dull locally, was generally fair. Temperature had risen a little in the north of our Islands but fallen in most other localities; readings ranged from a little above 80° at some of the Austrian stations, and a little above 75° over the Mediterranean to a little below 45° in ~~the north of~~ Lapland and the north of Russia. The highest individual readings were 83° at Trieste and Palermo, 82° at Buda-Pesth, 81° at Odessa, 80° at Jacobs, Pesaro and Constantinople, 79° at Cagliari and Barcelona, and 78° at Kiglow and Sanguinaire; the lowest was 43° at Archangel, 44° at Ulleaborg, 46° at Haparanda, 48° at Kuopio, 50° at Christiansund, 51° at Bodö and Helsingfors, and 52° at St. Petersburg and Parsonstown.

In the course of the day the shallow depressions over our Islands moved slowly eastwards. Showers fell in many parts of the Kingdom and thunderstorms with heavy rain were experienced over Central and Eastern England.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Monday, 15th July, 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.90	51	SW	2	c	29.98	+.12	52	50	-1	NE	0	r	*	59	43	0.04
	Hernösand ...	29.87	55	S	4	b	29.89	-.02	59	55	+4	S	2	b	*	61	46	0.35
	Stockholm ...	29.89	58	E	2	b	29.83	-.07	62	57	-2	E	4	o	*	70	50	-
	Wisby	29.85	57	E	4	c	29.73	-.15	66	56	+5	ESE	6	bc	*	70	54	-
	Bodö	29.93	49	N	4	b	29.91	-.04	56	49	+7	E	2	b	1	?	43	-
	Christiansund...	29.81	57	NNE	6	b	29.83	-.04	55	51	+1	NE	6	b	3	61	48	-
	Skudesnaes ...	29.78	60	NNW	2	r	29.71	+.13	57	53	+2	ESE	2	r	3	63	48	-
	Christiania Fjord (Fœrder)	29.72	67	ENE	4	bc	29.75	-.12	60	56	-1	ENE	4	o	1	?	59	0.04
	Skagen (The Scaw)	29.72	60	E	0	o	29.63	-.17	63	56	0	SE	3	c	1	70	59	-
	Fanö	29.69	55	NW	4	c	29.72	-.09	58	55	+4	NW	4	c	*	61	54	0.24
GERMANY.	Sumburgh Head	29.74	56	E	0	c	29.68	-.07	52	52	-2	E	0	o	0	58	44	-
	Stornoway ..	29.71	57	W	3	c	29.65	-.11	52	51	-1	E	2	o	2	59	46	0.05
	Wick	29.78	56	E	0	o	29.65	-.14	51	50	-7	N	1	r	0	62	48	0.52
	Nairn	29.73	55	SW	2	r	? 29.67	-.13	53	52	-4	E	0	c	0	65	45	0.08
	Aberdeen... ...	29.76	55	S	1	op	29.67	-.15	53	51	0	SE	1	c	1	62	46	0.08
	Leith	29.78	59	W	3	bc	29.69	-.15	58	52	-1	W	3	bc	*	64	49	-
	Shields	29.76	63	WSW	3	c	29.73	-.11	55	51	0	W	3	c	2	64	50	-
	Spurn Head ...	29.84	59	SW	3	o	29.81	-.03	56	53	-4	W	3	c	3	63	54	0.13
	York	29.85	63	W	2	bc	29.80	-.08	57	52	-1	WSW	3	bc	*	66	51	-
	Loughborough	29.89	63	WNW	3	c	29.86	-.02	60	54	+2	W	3	c	*	68	54	-
BRITISH ISLANDS.	Ardrossan ...	29.81	59	W	3	cp	29.69	-.18	53	51	-4	SW	3	p	3	59	51	0.16
	Malin Head ...	29.81	56	WNW	4	bc	29.70	-.18	50	49	-4	WNW	4	oph q	4	58	50	0.37
	Mullaghmore ...	29.90	56	W	5	cp	29.79	-.15	54	52	-2	WNW	5	cq p	5	60	51	0.23
	Belmullet ...	29.94	56	WNW	4	o	29.84	-.14	55	50	0	WNW	5	o	*	58	52	0.06
	Donaghadee ...	29.86	61	WNW	3	bc	29.77	-.15	57	54	0	WNW	5	bc	3	61	55	0.03
	Barrow-in-Furness	29.87	58	SW	4	c	29.79	-.09	54	52	-3	WSW	4	bcp	*	61	52	0.13
	Liverpool (Bidston)	29.90	58	WNW	3	c	29.83	-.08	56	50	0	W	5	bc	4	61	53	0.02
	Holyhead ...	29.92	58	SW	3	cq	29.85	-.08	55	52	-3	W	3	cp	3	63	53	0.01
	Parsonstown ...	29.95	59	Zo	0	o	29.89	-.10	54	51	0	SW	1	o	*	63	50	-
	Valencia	30.04	59	NW	2	c	29.99	-.06	55	52	-5	NW	3	op	3	68	51	0.05
	Roche's Point...	29.99	63	NNW	3	bc	29.96	-.06	57	52	-1	NW	4	bc	3	65	52	-
	Pembroke ...	29.97	59	NW	2	c	29.93	-.03	55	53	-3	W	4	c	3	61	54	-
	Scilly	30.03	62	WSW	4	bc	30.00	+.01	57	56	-5	NW	5	oq	5	65	54	0.02
	Prawle Point ...	30.00	60	W	3	c	29.97	+.06	59	56	-4	W	3	c	2	69	54	.
	Jersey	30.01	64	W	5	bm	30.04	+.12	60	56	0	W	5	cm	4	66	59	0.02
	Hurst Castle ...	29.94	69	WNW	3	c	29.95	+.09	61	61	+2	W	4	bc	2	70	56	-
	Dungeness ...	29.87	61	SSW	2	c	29.92	+.11	60	57	0	W	4	c	3	67	54	0.15
	London	29.89	65	NW	1	c	29.91	+.10	60	56	-1	W	2	c	*	69	54	0.02
	Oxford	29.93	59	NW	1	bc	29.91	+.05	57	55	0	WSW	2	o	*	65	55	.
	Cambridge ...	29.90	63	NW	1	o	29.88	+.05	60	56	+1	SW	1	f	*	69	52	0.02
	Yarmouth ...	29.85	62	NE	2	b	29.86	+.05	59	57	+2	WSW	2	bc	2	63	54	0.01
GERMANY.	Cuxhaven ...	29.72	60	NNW	5	o	? 29.79	-.01	63	60	+4	NW	5	c	*	68	59	.
	Berlin	29.76	67	S	2	o	29.78	-.01	60	58	-5	WNW	3	r	*	77	57	0.20
	Wiesbaden ...	*	*	*	*	*	29.95	+.10	60	55	-7	NW	1	bc	*	70	59	0.20
	Munich	30.00	56	SW	5	o	30.06	+.08	60	55	-1	SW	6	c	*	70	54	0.16
FRANCE & NETHERLANDS.	The Helder ...	29.84	59	NW	1	c	29.86	+.09	60	57	+1	WSW	1	bc	2	61	57	0.24
	Brussels .. ... DAM	*	*	*	*	*	29.95	+.10	58	57	-2	N	1	o	*	69	54	0.91
	Cape Gris Nez...	?		N	1		?	?	59	55	0	WNW	4	c	4	64	57	0.12
	Paris	29.95	62	WNW	1	c	30.07	+.13	59	56	0	WSW	1	c	*	72	52	0.24
	Brest	?	64	NNW	3	b	?	?	58	55	-2	NW	4	o	3	?	54	-
	Lorient	30.06	64	W	5	bc	30.11	+.10	60	57	+2	WNW	4	bc	4	64	57	-
	Rochefort ...	30.15	66	WNW	4	bc	30.17	+.08	63	61	0	WNW	3	bc	2	70	55	-
	Belfort														*			
	Lyons	30.04	69	NW	1	c	30.13	+.11	61	57	-1	NW	1	c	*	71	58	-
	Nice...	29.74	82	SW	5	b	29.92	+.04	73	66	+2	SW	1	b	1	88	64	-
	Perpignan ...	30.05	73	NW	2	o	30.13	+.08	68	60	+2	NW	2	b	*	78	60	-
	Biarritz	30.19	66	NW	3	c	30.17	+.02	63	60	-2	S	2	b	1	72	59	0.08
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon.	30.08	64	NNW	6	b	30.06	-.11	64	60	+1	NNW	5	b	?	72	61	-

For Explanation of Columns, see p. 4. Note.—In the Report of June 10th the amount of ‡ *Received too late for insertion in Charts on p. 4.*

[illegible] was 0.84 in.

WEATHER CHARTS

for 8 a.m. on Monday, 15th July, 1889.

BAROMETER, WIND AND SEA.

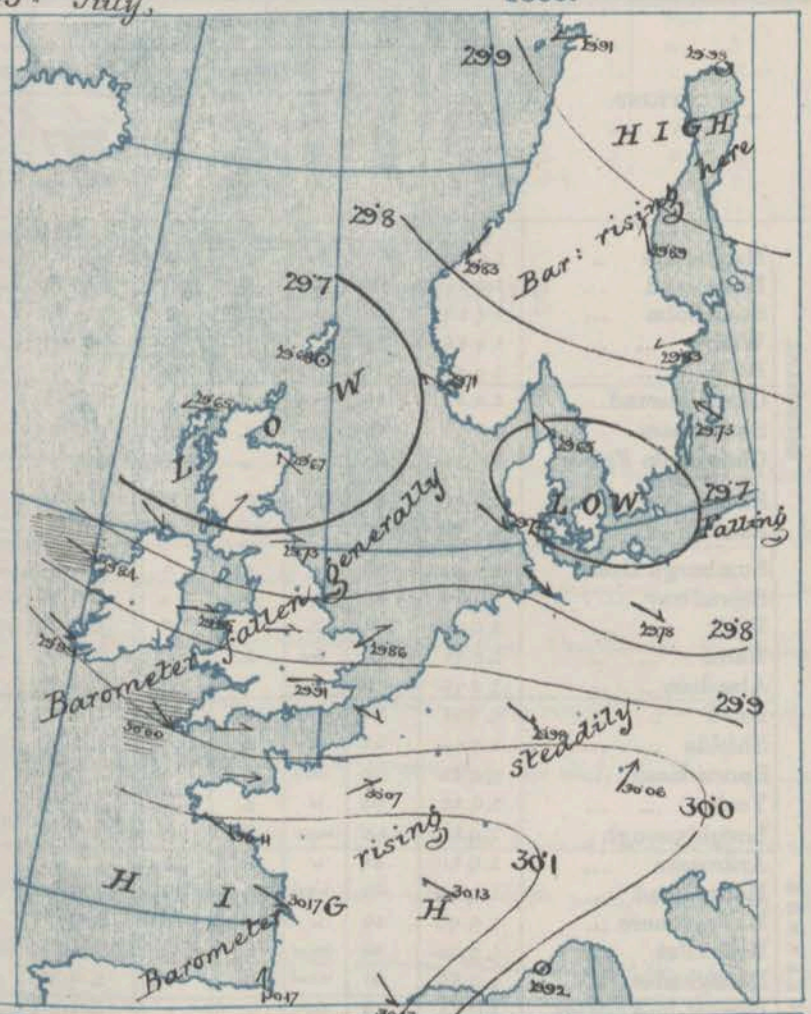
EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—

= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE – Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

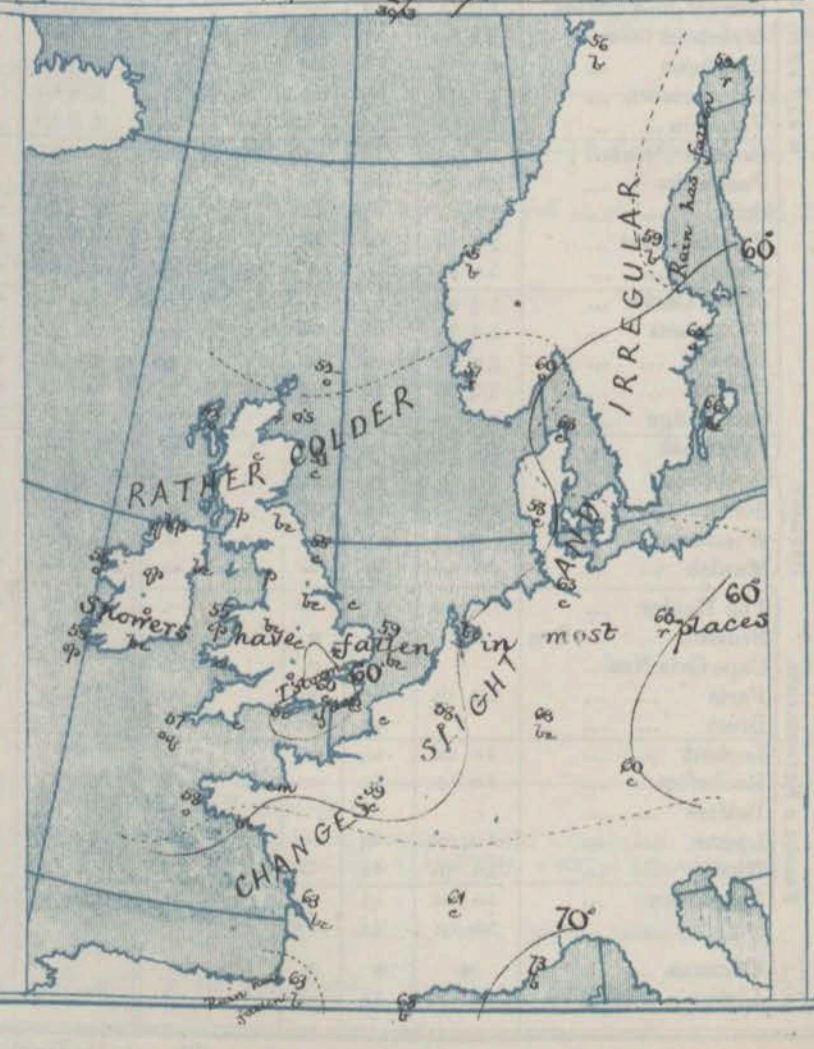
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL – A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·2 ins: to 30·0 ins: over the Bay of Biscay, Spain, France, and South Germany — 29·9 ins: and more over Lapland and Finland.
Lowest, 29·7 ins: and less, in two depressions, lying, one over Scotland, the other over Denmark and the Sound.
Gradients moderate, for W. winds over Ireland, England, the Netherlands and the north of France, slight, for E. winds in the far north.
Barometer rising over France and Bay of Biscay, falling slowly elsewhere.

TEMPERATURE

Highest, 73° at Nice. 68° at Perpignan, 64° at Lisbon, 63° at Biarritz, Rochefort and Cuxhaven, 61° at Hurst Castle, 60° in London and Berlin.
Lowest, 50° at Malin Head, 51° at Neill, Stornoway, Scarborough Head, and Aspatria, 53° at Ardrossan and Aberdeen, 55° at Valencia, Holyhead, Shields and Christiansund.
Rather low generally for the time of year. The daily maxima yesterday were below 70° over nearly the whole of our Islands, but 88° was recorded at Nice.

WIND

Moderate to fresh from NW. in Ireland and over the Bay of Biscay and Holstein.
W. over England and the English Channel. E. over Scandinavia.
Calms or E. airs prevail in the north and east of Scotland.

WEATHER

Rather cloudy or overcast in most places, with showers of rain at many stations, and hail in the extreme north of Ireland.
Thunder and lightning occurred yesterday over the southeast of England, and showers in many places.

SEA

Rather rough at Mullaghmore and Sailly, moderate to slight at our western, southern, and southeastern stations generally, smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is no indication of any important change at present.

FORECASTS

For the 24 hours ending at NOON on 16th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	Variable and E. breezes, cloudy, rain at times
1 SCOTLAND EAST	
2 ENGLAND N.E	W. breezes, moderate; some showers, bright intervals, thunder in some localities.
3 ENGLAND EAST	
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	Same as No. 0 and 1.
7 ENGLAND N.W.	W. and NW. breezes, showery, thunder locally
8 ENGLAND S.W.	
9 IRELAND NORTH	NW. breezes, cloudy, some showers, cool at night.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesmes ...	29.80	63	50	WNW 6	b	2	Holyhead ...	29.94	60	54	WSW 3	c	2
Sumburgh Head							Valencia						
Stornoway ...	29.74	58	55	W 3	o	3	Scilly						
Aberdeen ...							Jersey	29.98	65	61	W 5	b	4
Shields							Dungeness ...	29.84	61	60	ENE 3	c	3
Ardrossan ...							London						*
Malin Head ...	29.87	56	52	W 4	o	o	Yarmouth ...						
Mullaghmore ...							Rochefort ...	30.13	67	64	WNW 4	o	2
Belmullet ...	29.97	55	60	NW 3	o	*							

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The continental information has not yet arrived

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD

FROM THE 7TH TO THE 13TH JULY 1889.

The weather of the past week has been changeable and unsettled, with considerable falls of rain in most districts, and thunderstorms at some of the English and Continental stations.

At the beginning of the period barometrical pressure was highest, in an anticyclone lying off the northwest of Spain, and lowest, in a well defined depression which had formed over the south of Norway. A decided cyclonic circulation of wind was reported over the North Sea and adjacent coasts, but over France and the south of England moderate breezes from the W or NW were general.

On the night of the 7th a shallow secondary disturbance appeared near the mouth of the Channel, and heavy rain fell at some of our southwestern stations, but in the course of the 8th the new system and the larger depression over Norway filled up gradually. During the ensuing night, however, a fresh disturbance advanced to our southwest coasts, and in the course of the 9th and 10th this system after spreading northwards over our western coasts, moved gradually eastwards to the north and east of England, its progress being attended by heavy rain in many parts of the Kingdom. Cold E'ly winds prevailed over the northern parts of the Kingdom, but in the south the wind shifted from S. to W., and in the afternoon of the 11th it reached a fresh gale in the Strait of Dover.

During the night of the 11th the depression moved away quickly, and by 8 am next day it had reached the south of Scandinavia. A decided improvement in the weather now took place over our Islands, but on the 12th shallow disturbances began to appear over various parts of the United Kingdom, and at the close of the week thunder showers were experienced at many of the English stations. The thunderstorm which prevailed at Cambridge on the night of the 12th was attended by as much as 2.2 inches of rain.

Temperature has been mostly rather low in the northern parts of the Kingdom, but in the South it has not differed greatly from the average. The highest readings were experienced on the 12th, when the thermometer rose slightly above 70° at some of the Inland English stations.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for TUESDAY 16TH JULY. *1883.*

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.									PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.96	52	S	0	b	29.90	−.08	58	51	+6	S	0	b	*	61	45	—
	Hernösand ...	29.91	58	S	0	b	29.89	0.0	57	54	−2	ENE	6	bc	*	68	46	—
	Stockholm ...	29.79	59	E	2	0	29.74	−.09	60	55	−2	ENE	2	0	*	70	50	—
	Wisby	29.72	58	E	4	r	29.69	−.04	60	57	−6	ESE	4	r	*	72	55	0.04
	Bodö	29.88	60	ENE	2	b	29.83	−.08	64	53	+8	NE	2	b	1	8	48	—
	Christiansund...	29.75	59	NNE	6	c	29.71	−.12	58	54	+3	ENE	1	b	2	64	57	—
	Skudesnaes ...	29.74	55	S	0	r	29.65	−.06	55	54	−2	S	0	r	1	57	52	0.47
	Christiania Fjord (Farder)																	
	Skagen (The Scaw)	29.61	60	S	0	r	29.63	−.02	60	55	−3	W	2	bc	1	70	55	—
	Fanö	29.76	56	S	0	bc	29.67	−.05	62	61	+4	S	1	bc	*	64	55	—
	Sumburgh Head	29.68	55	SE	1	0	29.72	+.04	56	55	+4	NE	1	0	3	56	49	0.17
	Stornoway ..	29.68	53	N	3	r	29.75	+.10	56	54	+4	E	3	bc	3	57	38	0.10
	Wick	29.66	56	N	1	0	29.74	+.09	58	55	+7	N	1	c	1	58	42	0.05
	Nairn	29.64	56	ENE	2	bc	29.74	+.07	53	52	0	S	0	c	1	62	50	0.42
	Aberdeen... ...	29.66	56	W	1	c	29.73	+.06	57	52	+4	NE	2	bc	2	60	49	0.04
BRITISH ISLANDS.	Leith ...	29.65	59	W	3	c	29.72	+.03	53	50	−5	W	1	c	*	63	47	0.08
	Shields	29.69	54	W	2	cp	29.69	−.04	56	52	+1	WNW	3	c	2	63	51	0.16
	Spurn Head ...	29.75	58	W	3	c	29.74	−.07	56	52	0	W	4	bc	4	64	51	0.01
	York	29.75	60	W	3	bc	29.75	−.05	57	52	0	W	3	bc	*	65	48	0.21
	Loughborough	29.80	62	W	4	c	29.82	−.04	58	53	−2	W	3	bcwr	*	66	48	—
	Ardrossan ...	29.68	59	WNW	3	c	29.73	+.04	57	55	+4	WNW	3	bc	2	66	48	—
	Malin Head ...	29.69	56	NW	4	cp	29.76	+.06	54	51	+4	WNW	3	op	3	58	51	0.13
	Mullaghmore ...	29.79	57	WNW	6	bcpq	29.79	0.0	57	53	+3	WNW	5	c	4	60	51	0.22
	Belmullet ...	29.85	56	WNW	3	op	29.82	−.02	55	52	0	WNW	2	op	*	59	51	0.10
	Donaghadee ...	29.74	55	NW	2	c	29.77	0.0	54	51	−3	WNW	3	c	1	62	52	0.28
	Barrow-in-Furness	29.74	57	WSW	5	bc	29.74	−.05	55	52	+1	NW	4	bcp	*	60	53	0.02
	Liverpool (Bidston)	29.77	58	W	5	c	29.80	−.03	54	51	−2	W	5	op	4	63	49	0.14
	Holyhead ...	29.84	55	WSW	4	qcp	29.80	−.05	55	52	0	W	4	cpq	4	61	50	0.39
	Parsonstown ...	29.86	55	S	0	r	29.86	−.03	56	52	+2	S	0	0	*	61	46	0.16
	Valencia	29.97	62	WNW	4	bc	29.89	−.10	59	54	+4	WNW	1	bc	1	63	52	0.03
	Roche's Point...	29.91	55	NW	5	cq	29.88	−.08	58	53	+1	WNW	2	bc	3	64	51	—
	Pembroke ...	29.88	58	WSW	5	bc	29.88	−.05	56	53	+1	W	4	bc	3	61	54	—
	Scilly	29.98	62	W	5	c	29.93	−.07	58	53	+1	SW	4	r	4	63	55	0.01
	Prawle Point ...	29.96	55	WSW	4	c	29.94	−.03	57	55	−2	WSW	3	cq	2	61	53	0.01
	Jersey	30.04	61	WSW	4	cmq	29.99	−.05	59	55	−1	WSW	5	cqm	4	65	57	—
	Hurst Castle ...	29.92	61	WSW	6	bcp	29.91	−.04	60	60	−1	W	4	bc	3	67	56	0.02
	Dungeness ...	29.88	61	WNW	6	bc	29.86	−.06	59	55	−1	WNW	5	c	5	67	54	0.65
	London	29.85	60	W	3	cr	29.87	−.04	58	53	−2	W	2	c	*	67	54	0.02
	Oxford	29.86	56	WSW	2	c	29.87	−.04	55	52	−2	WSW	3	bc	*	65	49	0.10
	Cambridge ...	29.82	60	SW	1	bc	29.83	−.05	58	53	−2	W	1	b	*	69	47	—
	Yarmouth ...	29.82	62	WSW	3	c	29.80	−.06	57	55	−2	W	4	bc	2	65	49	0.02
GERMANY.	Cuxhaven ...	29.84	59	W	3	b	29.74	−.05	57	56	−6	SW	3	c	*	65	56	0.06
	Berlin	29.88	65	W	2	b	29.86	+.08	61	57	+1	WSW	2	0	*	70	57	0.16
	Wiesbaden ...	*	*	*	*	*	29.95	−.03	60	56	0	W	1	bc	*	72	57	0.08
	Munich	30.12	57	S	0	c	30.10	+.04	61	57	+1	SW	3	0	*	66	52	0.04
FRANCE & NETHERLANDS.	The Helder ...	29.82	61	SW	3	r	29.75	−.11	58	54	−2	WSW	2	b	3	64	55	0.04
	Brussels	*	*	*	*	*	29.89	−.06	57	53	−1	WSW	3	0	*	66	54	0.04
	Cape Gris Nez...	?	59	W	4	bc	?	?	58	55	−1	W	5	c	5	64	54	0.12
	Paris	30.02	66	WSW	2	c	30.03	−.04	58	55	−1	SW	2	bc	*	73	56	—
	Brest	?	61	W	4	0	?	?	60	57	+2	W	3	0	4	66	54	—
	Lorient	30.12	61	W	5	0	30.08	−.03	59	55	−1	WNW	3	0	3	64	55	—
	Rochefort ...	30.16	66	NW	3	b	30.15	−.02	64	58	+1	WNW	3	c	2	72	59	—
	Belfort														*			
	Lyons	30.08	71	N	1	b	30.11	−.02	64	58	+3	ESE	1	b	*	75	54	—
	Nice...																	
	Perpignan ...	30.08	76	SW	1	b	30.11	−.02	72	64	+4	ESE	1	b	*	82	58	—
	Biarritz	30.14	69	N	3	b	30.15	−.02	64	60	+1	ESE	3	c	1	75	61	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.05	66	NW	5	b	30.06	0.0	64	59	0	NNW	5	b	2	79	59	—

For Explanation of Columns, see p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Tuesday, 16th July, 1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.

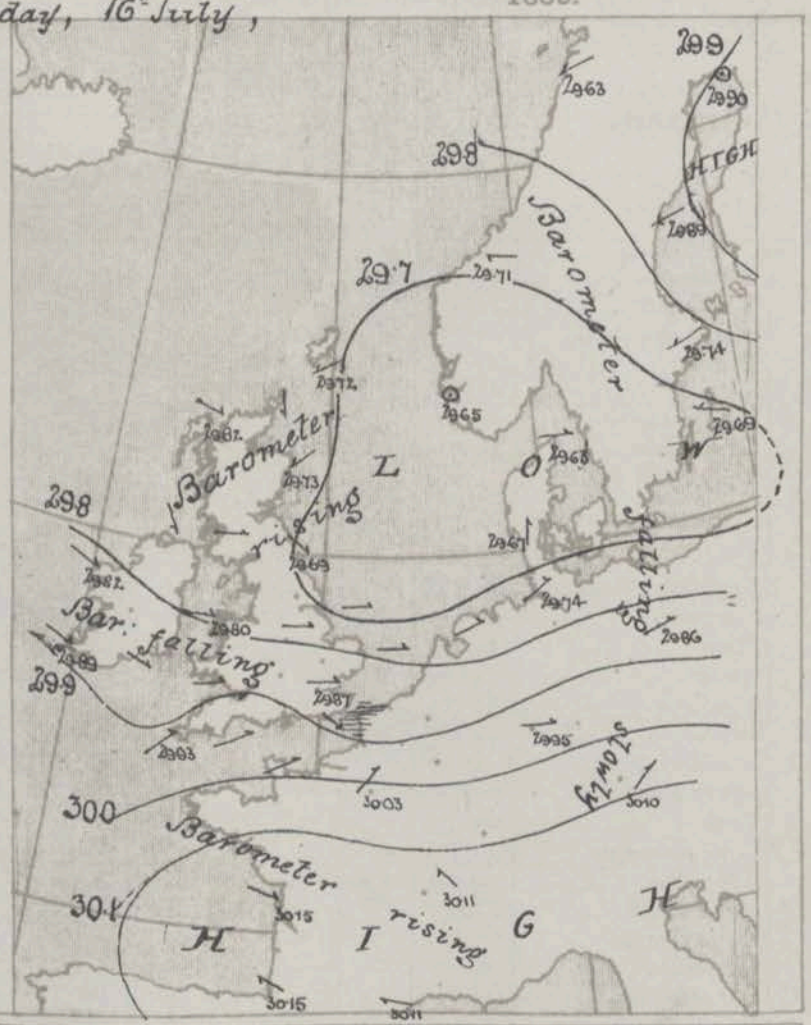
WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

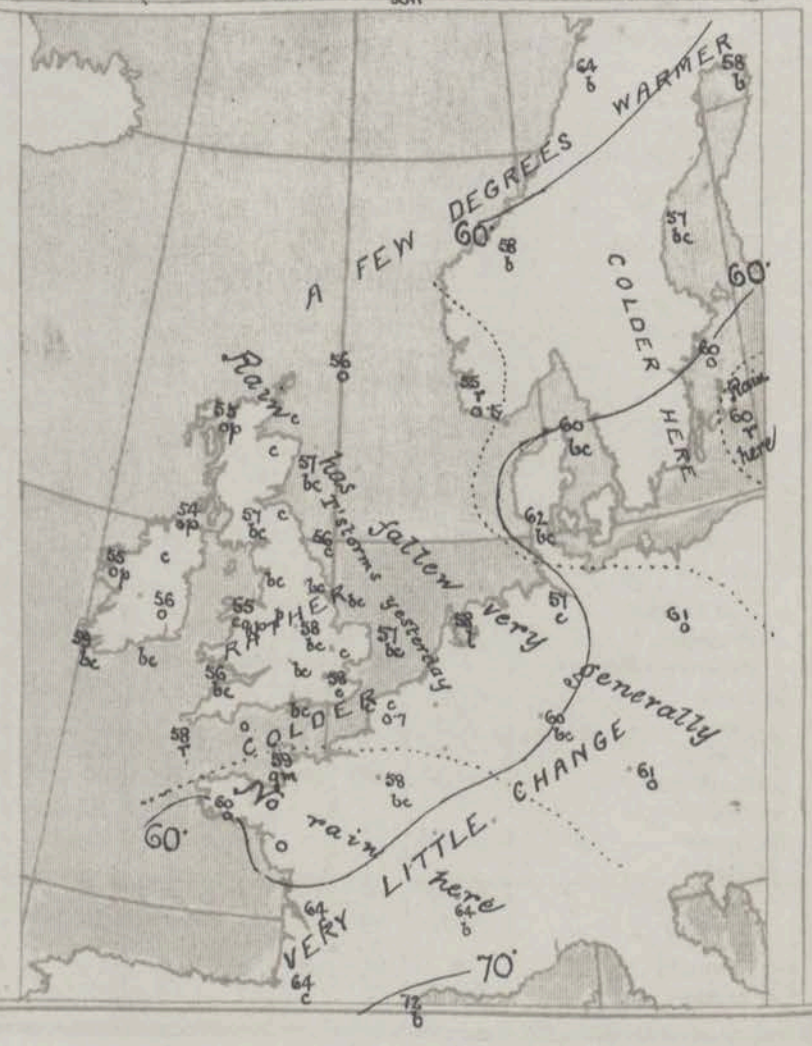
RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	52 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·00 ins: to 30·15 ins: over Spain, France, and South Germany — 29·90 ins: and more over Finland.
Lowest, 29·7 ins: and less, in a large depression over the North Sea, Denmark, and south of Scandinavia.
Gradients moderate over Ireland, England, and the north of France, and also over Sweden.
Barometer unsteady — falling slightly on our southwestern coasts, rising in Scotland.

TEMPERATURE

Highest, 72° at Perpignan, 64° at Falmouth, Biarritz, and Rochefort, and also at Bodö, 61° at Munich and Berlin.
Lowest, 53° at Nairn, 54° at Malin Head and Donaghadee, 55° at Barrow in Furness, Holyhead and Blacksness, 56° at Shields and Spurn Head.
The daily maxima recorded over our Islands yesterday were all below 70°, those on our extreme north and northwest coasts were below 60°.

WIND

E. at the Scandinavian stations and in the north of Scotland — light in force generally.
NW., moderate in Ireland — W., moderate, over England, the Channel, and the north and west of France.
W. to SW., light over the Netherlands and Germany.

WEATHER

Fine and bright in the north of Scandinavia and over Spain.
Cloudy elsewhere, with a changeable appearance of sky.
Showers are falling in several places, thunder is occurring at the Helder.
Rain showers fell yesterday in most places, lightning occurred at Yarmouth.

SEA

Rough in the Straits of Dover, moderate at our western and southern stations generally, smooth on our northeast and east coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is still no indication of any important change.

FORECASTS

For the 24 hours ending at NOON on 17th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	E. breezes, light and variable; fair to showery.
2 ENGLAND N.E 3 ENGLAND EAST	W. breezes, moderate; fair.
4 MIDLAND COUNTIES 5 ENGLAND SOUTH	W. breezes, moderate; passing showers, with bright intervals, cold tonight.
6 SCOTLAND WEST 7 ENGLAND N.W.	NW. and SW. breezes; changeable, some showers.
8 ENGLAND S.W.	Same as Nos 4 and 5.
9 IRELAND NORTH 0 IRELAND SOUTH	Wind backing to SW.; fair to rainy.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.		Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesmaes ...	29.75	56	54	SSW	2	o	3	Holyhead ...	29.83	57	53	WSW	4	cp	3
Sumburgh Head	29.66	54	53	E	3	r	4	Valencia	29.99	62	56	WNW	4	c	4
Stornoway ...	29.57	57	56	NE	4	be	3	Scilly	30.00	62	60	W	5	c	4
Aberdeen ...	29.66	58	53	SE	2	be	1	Jersey	30.05	62	58	SW	5	be	4
Shields	29.70	58	54	W	3	c	2	Dungeness ...	29.90	64	59	WNW	4	be	5
Ardrossan ...	29.68	57	54	W	3	c	2	London	29.89	64	55	WSW	3	op	*
Malin Head ...	29.71	57	52	WNW	4	be	4	Yarmouth ...	29.85	65	58	W	3	be	2
Mullaghmore ...	29.79	58	54	WNW	5	r	5	Rochefort ...	30.15	71	64	WNW	3	be	2
Belmullet ...	29.80	58	52	WNW	3	be	*								

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30.1 ins. and upwards, in an anticyclone lying over France, the Bay of Biscay and the North of Spain, but high, 30.0 ins. and upwards, in another area lying over Sweden. The lowest readings, 29.6 ins. and less, were found in a small depression lying near Kengahruwasser, but a larger area with readings below 29.7 ins. was found over Scotland and the northern parts of the North Sea. The wind was light to fresh from the NW.ᵗʰ in Ireland and France, as well as in North-Germany, and W.ᵗʰ over England, the Netherlands, South Germany and Italy. In Scandinavia, however, moderate to strong breezes from the E.ᵗʰ were reported, and over the Baltic light SE.ᵗʰ breezes, while in Scotland, Spain and Russia the wind was very variable. Rain was falling at several of the German stations, and local showers were reported over the United Kingdom, but elsewhere the weather was mostly fine. Temperature had risen a little over the southeast of England and the northern parts of Scandinavia and Russia, but fallen in most other localities - quickly in parts of Germany and Austria; readings ranged from 80° or a little above at some of the Adriatic and Mediterranean stations, to a little below 50° in the North of Russia. The highest individual readings were 86° at Odessa, 82° at La Galle, 81° at Lesina, Brindisi and Malta, 80° at Constantinople, Barcelona and Palermo, 79° at Buda Pesth and Cagliari; the lowest were 46° at Archangel, 50° at Malin Head, 51° at Ulsk, 52° at Haparanda, Sumburgh Head and Stornoway, and 53° at Wexford, Kuopio, Kuopio, Aberdeen and Ardrossan.

In the course of the day shallow secondary disturbances travelled eastwards across the United Kingdom, occasioning showers in most districts, and thunder in the east of England. Temperature over our Islands remained rather low for the time of year.

REMARKS ON THE WEATHER FOR THE 24 HOURS ENDING AT 8 A.M. ON 15ᵀᴴ JULY.

The reports for Sunday morning showed that pressure was highest, 30.2 ins. and upwards, in an anticyclone lying off the northwest of Spain, but somewhat high, 29.9 ins. and upwards, in a long and broad band extending southeastwards from the northwest of Norway to central Russia. The lowest readings, 29.6 ins. and less, were found over northern Russia, but several small depressions with readings below 29.8 ins. were lying respectively over the north of Scotland and over various parts of Central Europe. The wind was light to fresh from the NW.ᵗʰ over our Islands and France, as well as in Russia and the south of Italy, but elsewhere variable breezes were reported. The weather was rainy in Holland and the East of England, and showery over nearly the whole of Western Europe, but fair or fine elsewhere. Temperature had changed little and irregularly, and readings ranged from 80° and upwards at several of the Mediterranean and Adriatic stations to 50° or less over the northern parts of Russia and Norway. The highest individual readings were 86° at Cagliari and Algiers, 84° at Cracow and Trieste, 81° at Constantinople, Pesaro, Lesina, Brindisi and Oran, and 79° at Buda Pesth, Odessa and Palermo; the lowest were 41° at Archangel, 49° at Bodö, Kuopio and St Petersburg, 53° at Haparanda, Ulsk, Hango, Helsingfors, Stornoway and Aberdeen, and 54° at Christiansund, Sumburgh Head, Malin Head and Parsonstown.

In the course of the day some shallow depressions travelled eastwards across the United Kingdom, and showery weather continued to prevail generally, with thunderstorms in some parts of England.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for WEDNESDAY 17TH JULY 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.78	57	NE	2	bc	29.69	−.21	59	53	+1	SSE	2	b	*	66	43	—
	Hernösand ...	29.79	56	X	0	c	29.73	−.16	57	52	0	NE	2	bc	*	70	50	—
	Stockholm ...	29.70	59	X	0	c	29.64	−.10	62	?	+2	X	0	c	*	64	54	—
	Wisby	29.69	56	ESE	2	0	29.61	−.08	60	56	0	E	2	0	*	70	54	0.08
	Bodö ... ... ‡	29.72	55	NNE	2	b	29.64	−.19	50	48	−.14	WSW	1	0	1	?	46	—
	Christiansund... ‡	29.71	53	NNE	4	bc	29.71	0.0	53	51	−5	N	2	f	2	64	50	—
	Skudesnaes ...	29.67	61	ENE	4	0	29.67	+.02	59	55	+4	ENE	2	c	2	63	54	—
	Christiania Fjord (Farder)	29.68	57	NE	5	r	29.66		55	52		NNE	3	0	2	57	54	0.43
	Skagen (The Scaw)	29.60	58	N	1	bc	29.59	−.04	57	54	−3	NE	2	0	1	70	54	0.12
	Fanö	29.67	57	WSW	3	c	29.66	−.01	63	57	+1	W	3	c	*	64	54	—
BRITISH ISLANDS.	Sumburgh Head	29.77	53	NNE	3	0	29.81	+.09	50	49	−6	N	3	0	4	60	48	0.04
	Stornoway ..	29.83	54	NE	4	0	29.93	+.18	52	50	−4	NE	4	0	4	60	48	0.08
	Wick	29.81	56	N	3	0	29.87	+.13	52	50	−6	N	4	0	3	64	49	0.02
	Nairn	29.77	62	ENE	1	bc	29.87	+.13	51	51	−2	ENE	2	r	2	65	51	0.35
	Aberdeen... ...	29.79	55	E	2	bc	29.82	+.09	52	51	−5	NNW	3	o/c	3	61	51	0.22
	Leith	29.77	57	E	1	bc	29.81	+.09	55	53	+2	NNW	1	c m	*	60	48	0.12
	Shields	29.75	56	N	2	c r f h	29.75	+.06	58	54	+2	NNW	3	c	2	60	45	0.11
	Spurn Head ...	29.76	56	NNE	2	b	29.75	+.01	57	53	+1	N	4	c	3	63	50	0.07
	York	29.77	59	NNW	2	c	29.78	+.03	56	52	−1	NNW	3	b	*	65	44	0.07
	Loughborough	29.80	63	WSW	2	b	29.80	−.02	57	54	−1	W	1	b m w	*	66	43	0.03
	Ardrossan ...	29.78	55	NNW	1	r b	29.84	+.11	54	53	−3	NNW	1	r	1	62	40	0.17
	Malin Head ...	29.82	58	N	3	b	29.90	+.14	55	53	+1	N	5	bc m	3	59	53	0.02
	Mullaghmore ...	29.83	57	NNW	2	bc	29.94	+.15	58	55	+1	NNW	5	c	3	61	53	—
	Belmullet ...	29.84	58	W	2	0	30.00	+.18	57	54	+2	NNE	3	0	*	60	47	0.08
	Donaghadee ...	29.82	60	NE	2	b	29.87	+.10	57	54	+3	WNW	4	bc	2	62	52	—
	Barrow-in-Furness	29.78	58	NW	4	bc	29.80	+.06	54	52	−1	NW	2	bc	*	58	49	—
	Liverpool (Bidston)	29.80	59	WNW	2	b	29.81	+.03	59	54	+5	NNW	1	bc	3	61	52	0.08
	Holyhead ...	29.82	58	WSW	2	b	29.86	+.06	56	53	+1	NNW	4	c w	3	62	51	—
	Parsonstown ...	29.84	57	NW	2	0	29.97	+.11	55	52	−1	NW	1	b	*	65	40	0.07
	Valencia	29.90	61	NNW	2	bc	30.01	+.12	59	55	0	N	1	bc	2	65	49	0.02
	Roche's Point...	29.84	62	NW	2	bc	29.98	+.10	58	54	0	N	2	b	3	63	49	—
	Pembroke ...	29.83	61	WSW	2	bc	29.89	+.01	55	53	+1	NNW	4	bc	2	62	50	—
	Scilly	29.80	57	NE	4	r	29.92	−.01	60	57	+2	NNW	4	bc	5	60	55	0.16
	Prawle Point ...	29.85	54	WSW	3	0	29.88	−.06	58	56	+1	W	3	b	1	59	54	0.22
	Jersey	29.94	58	WSW	3	0 r	29.88	−.11	57	55	0	NW	4	bc	4	61	53	0.53
	Hurst Castle ...	29.87	59	WSW	6	c	29.83	−.08	59	57	−1	NNW	2	m	3	66	52	0.46
	Dungeness ...	29.87	60	W	6	c	29.74	−.12	54	53	−5	NNW	4	r	3	66	53	0.47
	London	29.83	62	WSW	2	bc	29.77	−.10	57	55	−1	WNW	2	bc	*	67	52	0.06
	Oxford	29.82	57	SW	2	0	29.81	−.06	55	52	0	NNW	3	bc	*	66	48	0.02
	Cambridge ...	29.81	60	W	1	c	29.74	−.09	58	54	0	N	1	b	*	67	47	0.04
	Yarmouth ...	29.81	59	NW	1	bct	29.71	−.09	56	55	−1	NW	1	c	2	65	51	0.38
GERMANY.	Cuxhaven ...	29.75	58	WNW	4	bc	29.74	0.0	57	53	+2	SW	3	b	*	63	57	—
	Berlin	29.81	60	W	3	b	29.84	−.02	60	55	−1	WSW	2	0	*	68	52	0.20
	Wiesbaden ...	*	*	*	*	*	29.82	−.13	57	56	−3	SW	3	r	*	64	55	0.20
	Munich	30.06	60	W	1	c	29.97	−.13	62	57	+1	SW	3	0	*	68	55	—
FRANCE & NETHERLANDS.	The Helder ...	29.81	60	WSW	2	b	29.69	−.06	58	56	0	SSE	1	0	1	63	54	—
	Brussels	*	*	*	*	*	29.66	−.23	54	54	−3	ENE	3	r	*	65	53	0.51
	Cape Gris Nez...	?	59	WSW	5	c	?	?	54	52	−4	N	3	0	3	63	54	0.59
	Paris	29.98	63	SW	2	bc	29.75	−.28	59	57	+1	SW	4	0	*	67	56	0.04
	Brest	29.97	59	SW	6	r	?	?	58	55	−2	N	1	b	4	61	55	0.16
	Lorient	29.98	60	WSW	5	r	29.93	−.15	58	56	−1	NNW	3	*	5	64	57	0.08
	Rochefort ...	30.10	67	W	4	c	29.99	−.16	64	63	0	WSW	5	0	2	72	57	—
	Belfort	30.04	60	W	1	0	29.89	−.15	59	57	−1	W	1	0	*	64	55	0.12
	Lyons	30.00	70	NE	1	b	29.97	−.14	63	58	−1	ESE	2	b	*	79	58	—
	Nice...	29.92	74	SW	4	b	29.94	−.06	68	63	+1	ENE	4	m	1	79	59	—
	Perpignan ...	30.02	77	E	0	b	29.94	−.17	72	67	0	E	0	bc	*	84	61	—
	Biarritz	30.06	69	NNE	3	0	30.03	−.12	67	60	+3	NE	2	0	2	75	63	—
PENINSULA.	Corunna ... ... ‡	*	*	*	*	*	30.11	−.05	62	60	−2	ENE	4	f	4	72	53	—
	Lisbon.	30.04	65	NNW	5	b	30.07	+.01	62	57	−2	NNW	4	b	2	77	59	—

For Explanation of Columns, see p. 4.

‡ Received too late for insertion in Charts on p. 8.

WEATHER CHARTS

for 8 a.m. on Wednesday, 17th July, 1889.

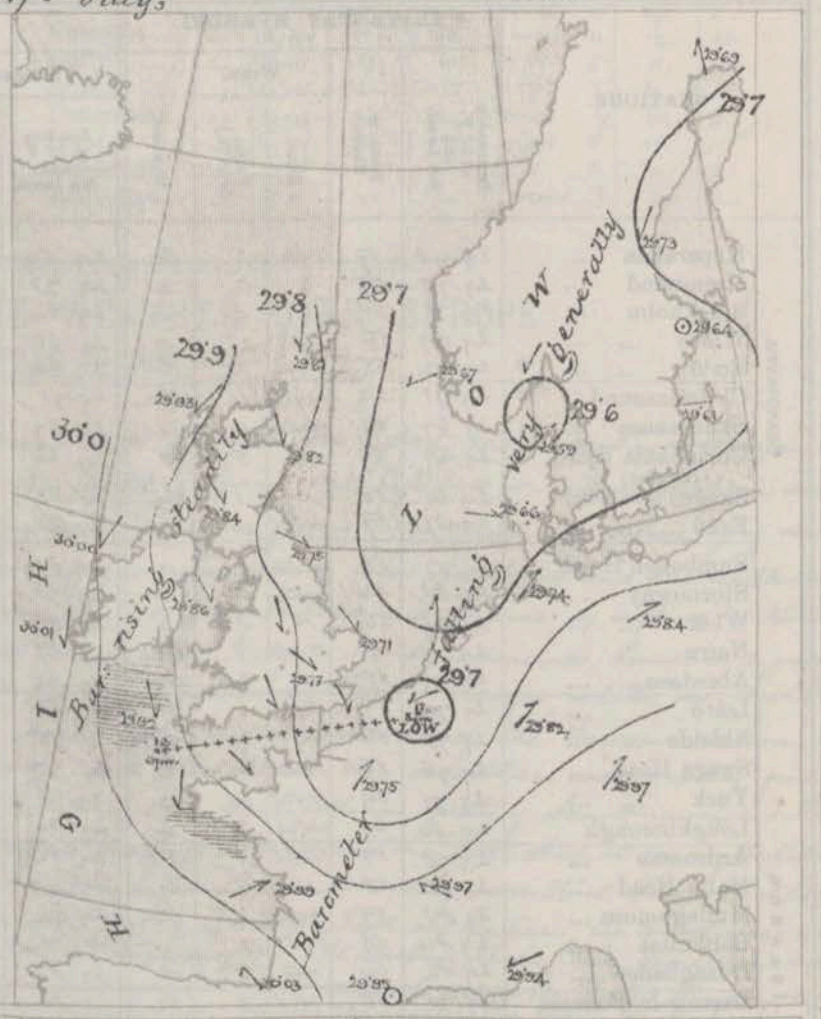
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shown thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

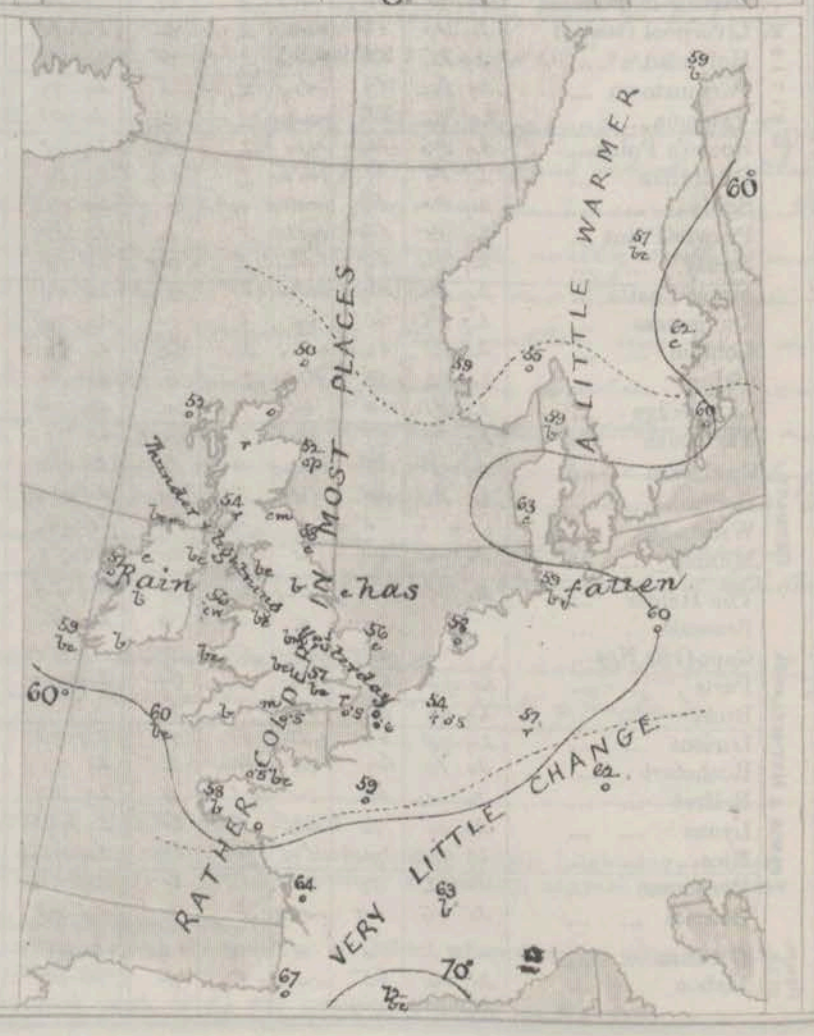
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·871
Aberdeen	29·831
Leith	29·850
Shields	29·878
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·936
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·0	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	56·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·0 ins. and more, in the west of Ireland and over the Iberian Peninsula — 29·9 ins. and more over South Germany and the centre of France.
Lowest, 29·7 ins. and less, in a large low pressure area covering Scandinavia and the North Sea, and also in a small depression over Belgium.
Gradients moderate; favourable for N. winds in our Islands.
Barometer rising in west and north, falling in south-east and east.

TEMPERATURE

Highest, 72° at Perpignan, 68° at Nice, 67° at Biarritz, 64° at Rochefort, 60° at Berlin.
Lowest, 50° at Stornoway, 51° at Wick, 52° at Aberdeen, and 55° at Leith, Malin Head and Oxford.
Daily Maxima in our Islands yesterday were all below 70°, some below 60°; Minima this morning were below 45° at several northern stations, and below 50° at Oxford and Cambridge.

WIND

Moderate from the NW. and N. over our Islands, the Channel and Brittany.
SW. at Paris and in Germany. S. in Holland, and E. at Brussels.
Over Scandinavia it is apparently NE., but some Norwegian reports are still wanting.

WEATHER

Changeable; fine and bright in some places, rainy in others.
Appearance of sky is showery in London.
About half an inch of rain fell at the Channel stations during the night, showers in many places. Thunderstorms occurred in the north.

SEA

Rather rough at the mouth of the Channel, moderate or slight at our other stations.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Some slight secondary disturbances in the north appear likely to cause heavy passing showers in many districts today, but tonight will probably be fine, and cold at the inland stations.

FORECASTS

For the 24 hours ending at NOON on 18th July. 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E	N. winds moderate; showery to fair, very cold tonight.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	N. breezes, moderate; rather cold, heavy passing showers.
6 SCOTLAND WEST 7 ENGLAND N.W. 8 ENGLAND S.W. 9 IRELAND NORTH 0 IRELAND SOUTH	N. breezes, moderate; showery to fair. Cold.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▽), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (△), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesmes ...	29.65	63	58	ENE 4	o m	2
Sumburgh Head	29.75	57	56	NE 3	o	4
Stornoway ...	29.80	59	58	NE 3	c	3
Aberdeen ...	29.77	58	53	E 2	bc	3
Shields	29.74	57	54	WNW 3	p	2
Ardrossan ...	29.76	58	53	S 0	b	0
Malin Head ...	29.80	58	54	N 3	b b	2
Mullaghmore ...	29.81	57	54	WNW 4	c	2
Belmullet ...	29.84	57	53	W 2	o	*
Holyhead ..	29.82	61	53	W 3	b	3
Valencia	29.88	64	57	NW 2	bc	2
Scilly	29.86	59	59	S 0	f	1
Jersey	29.99	57	56	WSW 4	ogm	4
Dungeness ...	29.88	63	58	W 6	c	5
London	29.86	63	55	W 3	bc	*
Yarmouth ...	29.81	64	57	W 4	bc	2
Rochefort ...	30.13	65	63	WNW 4	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30·1 ins. and upwards, over the Bay of Biscay, the south of France, and the north of Spain, and high 30·0 ins. and upwards over the extreme north of Russia. The lowest readings 29·6 ins. and less were found in a small depression lying over the Baltic Provinces, but a large area with readings below 29·7 ins. extended from the North Sea across Denmark, the south of Scandinavia and the Baltic to Western Russia. The wind was light or moderate from the E.ward or NE.ward over the northern parts of Scandinavia, Russia and Scotland but W.ly or NW.ly over Ireland, England and France and SW.ly in Germany. Over Southern Europe the wind was light and variable, but on the southern shore of the Mediterranean it was NW.ly or N.ly. Rain was falling at some of the Baltic stations, and passing showers in many parts of the United Kingdom, but elsewhere the weather was generally fair. Over Central Russia, however, the sky was overcast. Temperature had risen a little over Northern Europe but fallen in most other localities; readings ranged from 75° and upwards over the Adriatic and Mediterranean to 55° or less over Northern Russia and the northern parts of our Islands. The highest individual readings were 85° at Constantinople, 82° at Malta and Cagliari, 78° at Barcelona, 77° at Thiese, ~~and~~ Lisbon, and Palermo, 75° at Naples and Nemours, and 74° at Algiers; the lowest were 50° at Archangel, 53° at Nairn and Leith, 54° at St Petersburg, Riga, Malin Head, Donaghadee and Liverpool, and 55° at Valentia, Skudesnaes, Belmullet, Thurso, Inverness, Holyhead and Oxford.

In the course of the day a small depression appeared near the mouth of the Channel and travelled eastwards its progress being attended by heavy rain in the extreme south of England. Elsewhere no important change was reported.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

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DAILY WEATHER REPORT.

for Thursday, 18th July, 1889.

Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.									PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.)	Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.63	57	2	0	b	29.72	+.03	59	55	0	S	2	bc	*	66	46	-
	Hernösand ...	29.64	57	SSW	2	bc	29.70	-.03	60	55	+ 3	S	2	c	*	72	46	-
	Stockholm ...	29.66	57	SE	2	c	29.61	-.03	62	57	0	SE	4	r	*	70	54	0.08
	Wisby	29.68	57	S	2	c	29.55	-.06	58	55	- 2	S	4	o	*	66	52	1.34
	Bodö	29.65	50	2	0	o	29.62	-.02	51	49	+ 1	2	0	o	o	52	46	0.12
	Christiansund...	29.63	51	NNE	2	o	29.57	-.14	50	48	- 3	SW	2	o	2	54	50	-
	Skudesnaes ...	29.65	52	NW	6	o	29.58	-.09	52	48	- 7	NW	6	bc	3	61	48	-
	Christiania Fjord (Farder)	29.57	61	NNE	2	o	29.49	-.17	60	55	+ 5	E	3	c	2	61	?	0.04
	Skagen (The Scaw)	29.51	58	SW	1	o	29.45	-.14	60	47	+ 3	S	1	o	o	64	52	0.04
	Fanö	29.57	54	NW	2	b	29.56	-.10	57	55	- 6	NW	3	cp	*	66	48	0.12
BRITISH ISLANDS.	Sumburgh Head	29.81	50	N	3	o	29.75	-.06	49	47	- 1	NNW	1	c	3	53	45	0.03
	Stornoway ..	29.96	52	NE	3	o	29.88	-.05	52	50	0	NE	1	o	2	54	47	-
	Wick	29.89	50	N	3	o	29.82	-.05	52	49	0	N	4	c	2	56	46	0.02
	Nairn	29.90	54	ENE	3	o	29.87	.00	50	50	- 1	W	2	o	2	56	46	-
	Aberdeen... ...	29.89	52	NNW	3	o	29.85	+.03	52	47	0	NW	3	o	3	56	48	0.01
	Leith	29.87	55	E	1	o	29.90	+.09	54	49	- 1	NW	1	cm	*	60	46	0.08
	Shields	29.83	55	N	4	o	29.89	+.14	54	49	- 4	NNW	3	c	3	59	46	0.13
	Spurn Head ...	29.77	58	NNW	1	f	29.89	+.14	54	51	- 3	WNW	4	o	3	62	52	0.07
	York	29.82	56	NNW	3	o	29.92	+.14	52	49	- 4	WNW	1	o	*	67	50	0.09
	Loughborough	29.81	59	WNW	3	c	29.95	+.15	56	54	- 1	WNW	3	c	*	68	52	0.06
	Ardrossan ...	29.87	60	NW	3	o	29.91	+.09	54	50	0	NW	3	b	2	65	50	-
	Malin Head ...	29.97	53	NNW	4	op	29.96	+.06	53	48	- 2	NNW	3	o	2	55	51	0.01
	Mullaghmore ...	30.00	56	NNW	4	ov	30.01	+.09	54	49	- 4	NNW	3	o	2	60	50	0.01
	Belmullet ...	30.05	55	N	3	bc	30.03	+.03	54	49	- 3	NNW	1	o	*	58	50	-
	Donaghadee ...	29.94	58	NE	3	bc	29.97	+.10	52	48	- 5	NNE	4	c	2	62	52	-
	Barrow-in-Furness	29.86	58	NNW	4	o	29.90	+.10	54	50	0	NW	4	bc	*	62	54	-
	Liverpool (Bidston)	29.89	58	WNW	4	o	29.95	+.12	53	48	- 6	WNW	4	o	4	63	53	0.02
	Holyhead ...	29.92	59	NNW	3	c	29.97	+.11	55	51	- 1	WNW	3	cg	3	64	52	-
	Parsonstown ...	29.99	61	NE	1	c	30.04	+.09	53	50	- 2	NW	1	c	*	65	49	-
	Valencia	30.05	62	NNW	3	bv	30.04	+.03	58	53	- 1	N	1	o	1	65	51	-
	Roche's Point...	29.99	62	N	3	bc	30.03	+.05	55	50	- 3	NNW	2	bc	2	66	50	-
	Pembroke ...	29.95	58	WNW	3	b	30.00	+.11	58	55	+ 1	N	2	c	1	60	54	-
	Scilly	30.00	61	NW	2	b	29.99	+.07		51		NEW	2	b	4	64		-
	Prawle Point ...	29.95	60	NW	3	b	30.00	+.12	61	58	+ 3	NW	1	bw	0	67	50	-
	Jersey	29.97	62	NW	3	b	30.01	+.13	61	57	+ 2	NW	2	bm	2	63	51	-
	Hurst Castle ...	29.90	63	WNW	3	bc	29.98	+.15	61	60	+ 2	NNW	1	c	1	69	51	0.01
	Dungeness ...	29.84	60	W	2	bc	29.94	+.20	57	54	+ 3	N	1	o	1	67	50	0.10
	London	29.85	55	W	2	c	29.95	+.18	58	55	+ 1	WNW	1	o	*	66	53	0.23
	Oxford	29.89	59	NW	3	b	29.96	+.15	58	54	+ 3	NW	2	c	*	66	54	0.25
	Cambridge ...	29.81	58	N	1	tl	29.94	+.20	56	53	- 2	2	0	o	*	65	49	0.12
	Yarmouth ...	29.77	62	NNW	2	bcv	29.86	+.15	58	57	+ 2	NW	3	bc	2	63	53	0.03
GERMANY.	Cuxhaven ...	29.58	60	NNW	5	r	29.60	-.14	61	60	+ 2	WNW	6	r	*	64	59	0.28
	Berlin	29.59	58	WSW	1	r	29.65	-.19	55	52	- 5	WNW	7	o	*	64	54	0.08
	Wiesbaden ...	*	*	*	*	*	29.91	+.09	53	51	- 2	SW	3	b	*	64	50	0.24
	Munich	29.83	62	SW	1	c	30.01	+.04	56	53	- 6	SW	4	c	*	72	52	0.08
FRANCE & NETHERLANDS.	The Helder ...	29.70	59	NW	3	f	29.77	+.08	59	56	+ 1	NW	4	c	4	61	57	0.05
	Brussels	*	*	*	*	*	29.90	+.24	58	55	+ 4	W	3	c	*	60	51	0.08
	Cape Gris Nez...						?											
	Paris	29.90	64	WNW	3	bc	30.00	+.25	55	52	- 4	S	1	b	*	69	46	-
	Brest	?	62	NNW	1	b	?	?	55	53	- 3	NE	1	b	1	64	48	-
	Lorient	29.99	63	WNW	4	bc	30.01	+.08	54	52	- 4	ENE	1	b	2	66	52	-
	Rochefort ...	30.02	62	NW	3	r	30.04	+.05	59	56	- 5	ENE	4	bc	2	68	50	0.24
	Belfort	29.89	58	W	3	r	‡ 29.99	+.10	56	50	- 3	SSE	1	b	*	64	51	0.35
	Lyons	29.86	70	NNW	2	o	29.99	+.02	59	55	- 6	NW	4	c	*	81	54	0.20
	Nice...	29.81	73	2	0	b	29.73	-.21	74	62	+ 6	SW	2	b	o	81	66	-
	Perpignan ...	29.90	77	NW	3	f	29.92	-.02	72	63	0	NW	2	bc	*	86	66	-
	Biarritz	30.02	70	NW	3	r	29.95	-.05	68	64	- 2	ENE	3	o	?	77	63	0.04
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.05	64	NNW	5	b	30.02	-.05	66	63	+ 4	NNW	5	bc	4	73	?	-

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on *Thursday, 18th July.* 1889.

BAROMETER, WIND AND SEA.

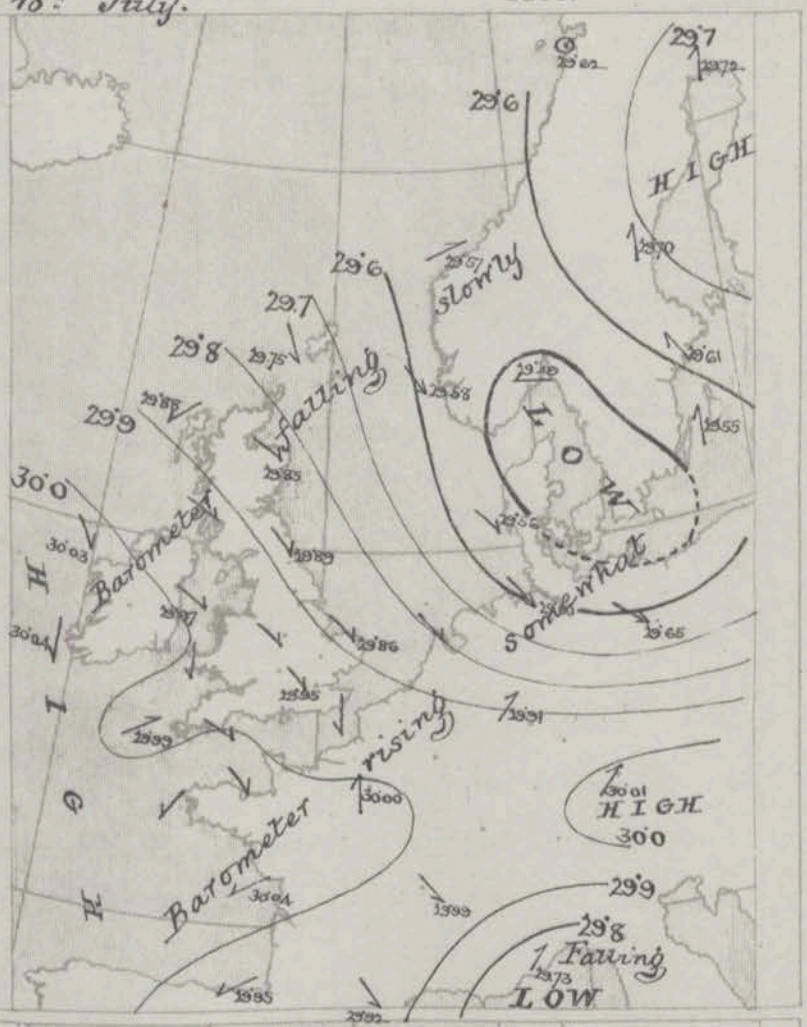
EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.
WIND - Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.
SEA DISTURBANCE - Where considerable, is shown thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

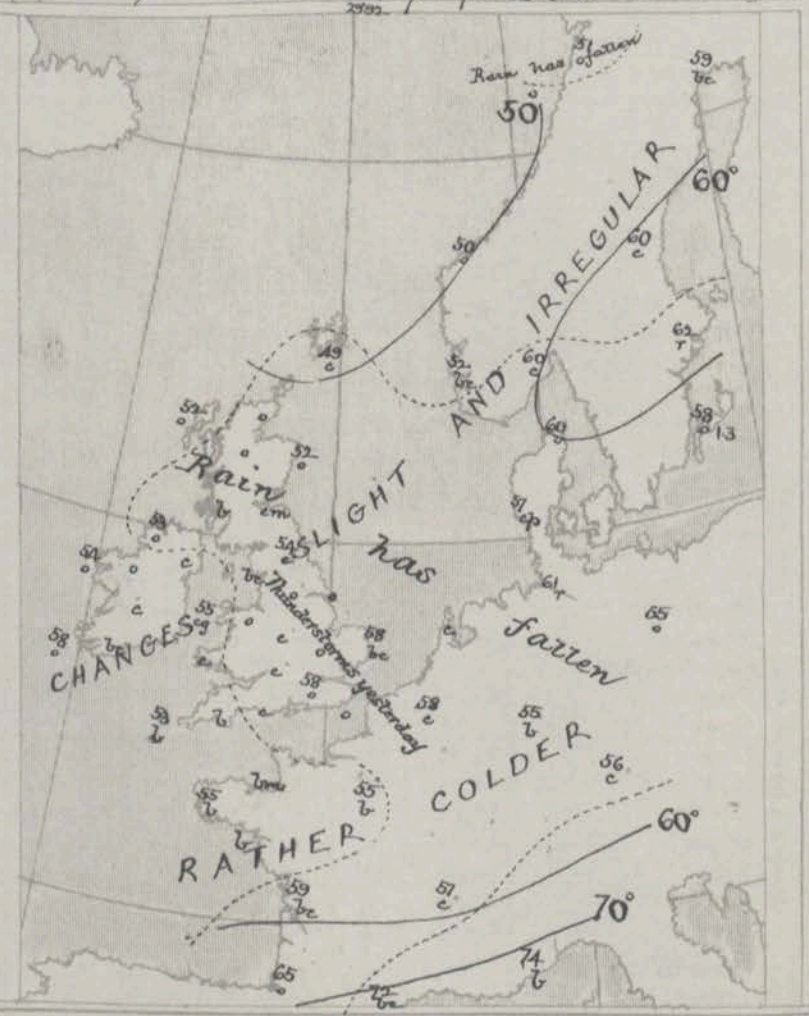
TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.
WEATHER is shown by Letters of the Beaufort Scale.
RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	55 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 0	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 8	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 5	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 5	58 · 8	1 · 82
LONDON	73 · 6	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·0 ins: and more, over Ireland, Brittany, the western part of the Spanish Peninsula and South Germany, and 29·7 ins: and more over Finland and the Gulf of Bothnia.
Lowest, 29·5 ins and less, in a depression lying over the Skager Rack and Denmark.
Gradients rather steep over Holland and North Germany, moderate over the North Sea, slight over our Islands, France and Spain.
Barometer falling again in extreme north and northwest, rising unsteadily in most other places.

TEMPERATURE

Highest, 74° at Nice, 72° at Perpignan, 66° at Lisbon, 65° at Biarritz, 62° at Stockholm, 61° at Cuxhaven and Hawks Point, 60° at the Scaw and Hernösand.
Lowest, 49° at Sumburgh Hd., 50° at Christiansund and Vardö, 51° at Bodö, 52° at Shoeburness, Aberdeen, Stornoway and York, 53° at Berlin.
It is low generally for the time of year. The daily maxima in our Islands yesterday were all below 70°, several below 60°

WIND

NW over the whole of our Islands and the North Sea, NE over the Bay of Biscay, W over Germany, S in Sweden.
It is light to moderate in most places, strong at Shoeburness and Cuxhaven, and blows a gale at Berlin.

WEATHER

Clear and bright over France and our extreme southwestern counties.
Cloudy, or overcast and unsettled elsewhere, with rain at Stockholm Fanö and Cuxhaven
Rain fell generally over Great Britain and to the southward of the North Sea yesterday. Sharp thunderstorms were very prevalent in the east and southeast of England and in Holland.

SEA

Moderate at some western stations, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The NW winds and rather showery weather appear likely to continue over England today. The probable effect of the baric fall in the west and north is not evident at present.

FORECASTS

For the 24 hours ending at NOON on 19th July 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E	NW and N breezes; cold changeable, some rain.	6 SCOTLAND WEST 7 ENGLAND N.W. 8 ENGLAND S.W. 9 IRELAND NORTH 0 IRELAND SOUTH	NW breezes, light; some showers with bright intervals.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	NW breezes, light, cold changeable, rain at times, thunder locally.	WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* ( ), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* ( ), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	29.67	60	57	WNW 4	o m	2	Holyhead ..	29.90	63	59	NW 3	bc	3
Sumburgh Head	29.83	51	49	N 2	o	3	Valencia	30.05	64	57	NNW 2	b	2
Stornoway ...	29.96	53	50	NE 3	o	3	Scilly	29.98	62	59	NW 3	bc	2
Aberdeen ...	29.86	54	50	N 3	qp	3	Jersey	29.94	63	58	WNW 4	bc	3
Shields	29.98	57	54	N 5	o	3	Dungeness ...	29.88	65	56	NNW 5	rtl	3
Ardrossan ...	29.86	65	59	NW 2	c	1	London	29.81	61	54	WNW 4	ott	*
Malin Head ...	29.95	53	51	N 4	o	3	Yarmouth ...	29.94	62	60	NW 3	b	3
Mullaghmore ...	29.99	58	54	NW 4	o m	2	Rochefort ...	30.00	62	62	NW 4	r	2
Belmullet ...	30.06	58	53	N 2	o	*							

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30·1 ins. and upwards, in an anticyclone lying off the Portuguese coasts but high, 30·0 ins. and upwards, in separate areas lying respectively over Italy and the south of Russia. The lowest readings, 29·5 ins. and less, were found in a small depression lying near St. Petersburg, but another small disturbance (below 29·6 ins. was lying over the Skagerrak, while a large area with readings below 29·7 ins. covered the whole of Scandinavia, Denmark, the North Sea, the Baltic, and the west of Russia. The wind was light to fresh from the NW.ward or N.ward over our Islands and the north of France, and light from the SW.ward over Central France, Germany, Austria, and Central Russia. Over Northern Russia, however, and the south of Scandinavia light E.ly or NE.ly breezes were reported, while over Algeria, the Mediterranean, and southern Europe the wind was very variable. The weather was in a showery condition over Great Britain and many parts of Central Europe, but fine in most other localities. Fog was, however, reported at Christiansund and also at Corunna. Temperature had changed very irregularly, and readings ranged from a little above 80° at Constantinople and at several of the Mediterranean stations to 55° or less in the north of our Islands and the west of Norway. The highest individual readings were 84° at Malta, 82° at Constantinople and Aumale, 81° at Barcelona, Cagliari, and Brindisi, 80° at Trieste, 79° at Tunis, and 77° at Lesina, Algiers, and Laballe; the lowest were 50° at Rodö and Sumburgh Head, 51° at St. Petersburg and Vaasa, 52° at Stornoway, Wick and Aberdeen, 53° at Christiansund, and 54° at Ardrossan and Harrow in Tunes.

In the course of the day small shallow depressions moved southwards over Great Britain occasioning showers in many localities and thunderstorms in the east and southeast of England. In some parts of the Metropolitan area the storms were severe and were accompanied by exceedingly heavy falls of rain and hail.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Friday, 19th July, 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.81	59	S	2	c	29.69	-.03	55	50	- 4	SE	4	r	*	70	46	-
	Hernösand ...	29.65	58	ENE	2	r	29.38	-.32	53	52	- 7	NE	8	r	*	72	46	0.69
	Stockholm ...	29.32	55	ENE	2	r	29.43	-.18	57	53	- 5	WSW	4	o	*	64	45	0.79
	Wisby	29.41	55	SW	6	r	29.58	+.03	56	53	- 2	SW	6	o	*	64	52	0.67
	Bodö	29.64	57	Z	0	o	29.66	+.04	60	53	+ 9	E	2	o	1	?	48	0.08
	Christiansund...	29.58	51	NNW	2	o	29.60	+.03	49	49	- 1	WSW	4	r	3	55	46	0.39
	Skudesnaes ...	29.64	51	NW	6	b	29.69	+.11	53	50	+ 1	W	4	bc	3	55	45	-
	Christiania Fjord (Fiorder)	29.44	60	W	4	b	29.50	+.01	58	53	- 2	NNW	3	c	2	64	55	-
	Skagen (The Scaw)	29.45	59	W	2	o	29.56	+.11	55	48	- 5	NW	5	b	4	64	52	-
	Fanö	29.71	54	NW	6	c	29.80	+.24	57	53	0	WNW	4	bc	*	63	52	0.16
BRITISH ISLANDS.	Sumburgh Head	29.71	51	WNW	3	c	29.66	-.09	51	49	+ 2	Z	0	c	1	58	44	-
	Stornoway ..	29.81	54	SW	1	r	29.69	-.19	52	51	0	Z	0	o	2	54	47	0.08
	Wick	29.81	54	N	2	c	29.68	-.14	54	52	+ 2	NW	2	o	2	60	45	0.01
	Nairn	29.80	55	W	2	o	29.68	-.19	56	53	+ 5	W	2	b	1	58	49	0.01
	Aberdeen... ...	29.84	50	SSE	2	op	29.72	-.13	55	51	+ 3	W	1	cp	2	62	48	0.02
	Leith	29.85	54	WNW	1	c	29.77	-.13	56	51	+ 2	W	1	c	*	60	50	-
	Shields	29.86	55	E	1	c	29.81	-.08	56	53	+ 2	W	3	c	3	58	50	-
	Spurn Head ...	29.88	59	W	3	c	29.88	-.01	57	53	+ 3	WSW	3	c	3	61	51	-
	York	29.90	59	W	4	o	29.88	-.04	54	52	+ 2	SW	3	o	*	64	47	-
	Loughborough	29.94	61	W	3	b	29.93	-.02	59	53	+ 3	W	2	bmw	*	63	46	-
	Ardrossan ...	29.59	57	NW	4	c	29.79	-.12	56	53	+ 2	W	4	o	3	62	50	0.02
	Malin Head ...	29.92	53	NW	4	ogp	29.81	-.15	52	51	- 1	SW	3	op	3	57	49	0.10
	Mullaghmore ...	29.98	55	WNW	4	o	29.87	-.14	52	50	- 2	WSW	3	p	2	59	49	0.09
	Belmullet ...	30.01	56	WNW	2	o	29.87	-.16	56	50	+ 2	W	2	o	*	58	52	-
	Donaghadee ...	29.95	55	NE	2	c	29.87	-.10	57	54	+ 5	W	3	c	1	63	50	-
	Barrow-in-Furness	29.91	59	NNW	4	b	29.86	-.04	55	50	+ 1	W	3	o	*	60	53	-
	Liverpool (Sidston)	29.95	55	W	4	o	29.90	-.05	56	50	+ 3	WSW	3	o	3	58	49	-
	Holyhead ...	29.98	56	WNW	2	c	29.90	-.07	57	54	+ 2	W	1	og	1	59	53	-
	Parsonstown ...	30.00	58	Z	0	o	29.92	-.12	58	50	0	Z	0	o	*	60	50	-
	Valencia	30.01	60	NW	1	bc	29.90	-.14	57	51	- 1	SE	1	o	1	64	45	-
	Roche's Point...	29.99	60	SW	1	bc	29.92	-.11	56	52	+ 1	NNW	1	c	2	64	50	-
	Pembroke ...	29.98	66	NW	1	c	29.91	-.09	58	56	0	E	1	bc	1	63	53	-
	Scilly	29.98	63	W	2	b	29.93	-.06	62	58	?	Z	0	c	2	65	53	-
	Prawle Point ...	29.98	60	SW	2	c	29.94	-.06	59	56	- 2	SSW	1	b	0	63	50	-
	Jersey	30.00	64	NW	3	b	29.96	-.05	64	59	+ 3	NNW	2	bmw	2	66	49	-
	Hurst Castle ...	29.97	63	W	3	c	29.94	-.04	64	63	+ 3	N	1	b	1	67	52	-
	Dungeness ...	29.94	61	WSW	3	bc	29.87	-.07	61	57	+ 4	SW	1	c	1	65	54	-
	London	29.93	66	WNW	2	bc	29.94	-.01	58	52	0	Z	0	bm	*	69	48	-
	Oxford	29.95	59	WNW	2	b	29.94	-.02	56	52	- 2	WSW	1	bcw	*	67	44	-
	Cambridge ...	29.94	62	NW	1	b	29.94	.00	57	51	+ 1	NW	1	b	*	66	43	-
	Yarmouth ...	29.93	59	NNE	1	og	29.92	+.06	56	55	- 2	WSW	2	bm	1	64	49	-
GERMANY.	Cuxhaven ...	29.77	58	WNW	5	r	29.88	+.28	59	57	- 2	W	4	bc	*	63	57	0.12
	Berlin	29.84	59	W	3	bc	29.99	+.34	59	56	+ 4	WNW	4	b	*	68	52	-
	Wiesbaden ...	*	*	*	*	*	30.02	+.11	56	52	+ 1	NW	1	b	*	66	48	-
	Munich	30.04	58	Z	0	b	30.02	+.01	57	54	+ 1	E	4	b	*	64	45	-
FRANCE & NETHERLANDS.	The Helder ...	29.91	58	WNW	3	c	29.91	+.14	59	55	0	W	1	b	1	59	55	-
	Brussels	*	*	*	*	*	29.97	-.07	59	56	+ 1	SSW	1	b	*	65	58	0.08
	Cape Gris Nez...	?	60	SW	3	c	?	?	59	57	?	W	2	o	2	66	57	-
	Paris	29.97	66	NE	1	b	29.97	-.03	58	55	+ 3	NNW	1	m	*	72	50	-
	Brest	?	60	N	3	b	?	?	64	62	+ 9	NE	1	b	1	66	54	-
	Lorient	30.00	64	WNW	2	b	29.96	-.05	57	55	+ 3	E	2	bc	2	64	52	-
	Rochefort ...	29.98	67	NW	4	b	29.94	-.10	60	57	+ 1	NE	4	c	2	78	54	-
	Belfort	29.95	61	NW	1	b	29.93	-.06	57	52	+ 1	E	2	b	*	66	48	-
	Lyons	29.93	66	N	3	b	29.93	-.06	57	53	0	N	1	c	*	70	52	-
	Nice...	29.76	73	SSE	2	bc	29.87	+.14	69	66	- 5	Z	0	bc	3	82	64	-
	Perpignan ...	29.88	68	SW	1	r	29.86	-.06	64	63	- 8	NE	2	o	*	82	62	0.39
	Biarritz	29.90	68	NW	2	o	29.91	-.04	60	59	- 5	S	2	r	1	75	57	1.38
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon.	30.00	66	WNW	3	o	29.97	-.05	64	63	- 2	SSW	3	o	2	73	64	0.04

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2*

WEATHER CHARTS

for 8 a.m. on Friday, 19th July. 1889.

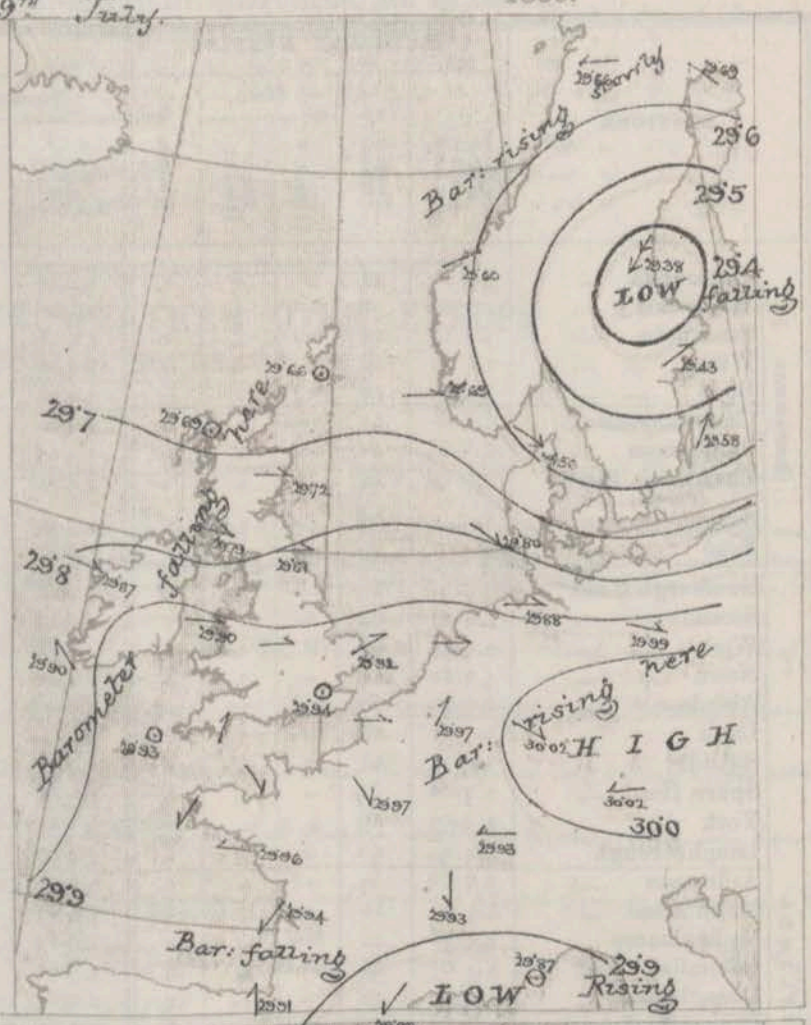
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

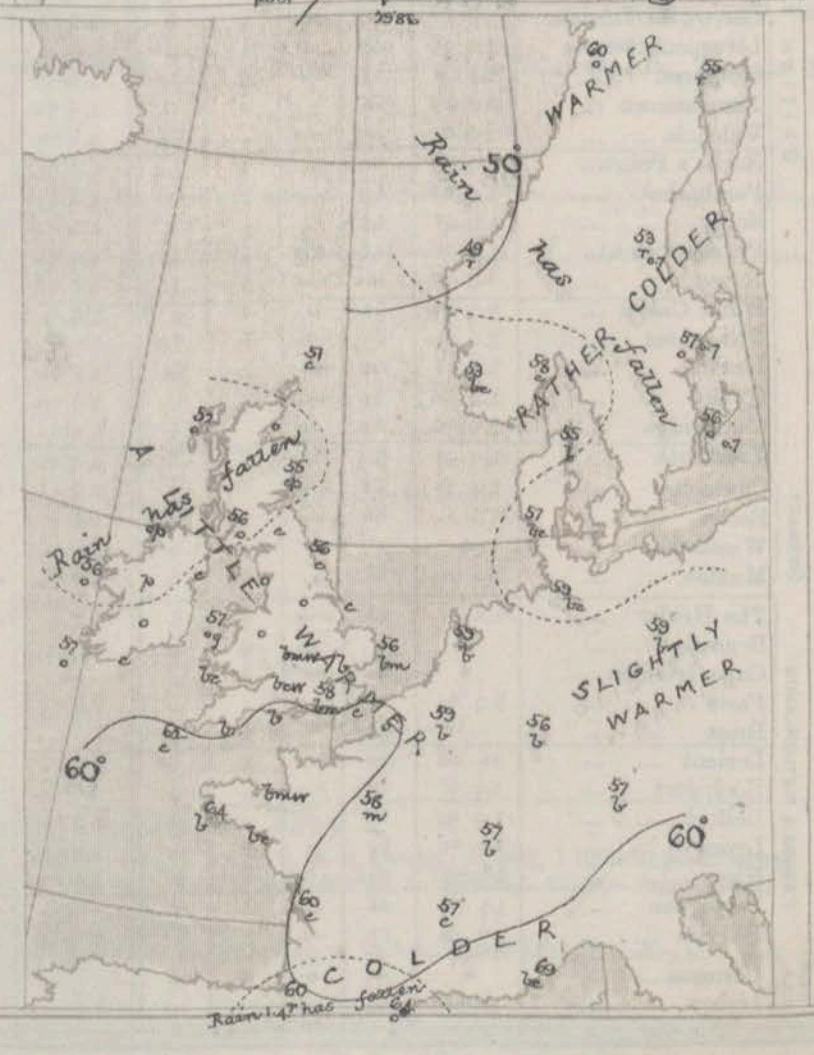
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·958
Cambridge	29·947
Yarmouth	29·943

TEMPERATURE, & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·0	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·8	57·4	55·6	2·67
Holyhead	63·0	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·47
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·0 ins: and more, over Central Germany; 29·9 ins: and more over France, Spain, the Bay of Biscay, and southern parts of England and Ireland.
Lowest, 28·8 ins: in a depression lying over Sweden; 29·7 ins: and less, off our extreme northern coasts, 29·8 ins: and less, off the west of Ireland, and the extreme south of France.
Gradient very slight over Germany, France, and the southern half of our Islands.
Barometer falling at our northern and western stations, in Spain and the west of France.

TEMPERATURE

Highest, 69° at Nice, 64° at Lisbon Perpignan, and Hurst Castle, 62° at Biella, 61° at Dungeness, and 60° at Bodö.
Lowest, 49° at Christiansund, 51° at Flamborough Head, 52° at Stornoway and Mullaghmore, 53° at Hernösand, 55° at Aberdeen.
It has been decidedly low over the inland parts of England during the night; minimum at Cambridge.

WIND

Very light and variable over Germany, France, and the southern half of our Islands.
Light W. over our northwestern and northern districts, moderate W. over the North Sea and Baltic.
A cyclonic circulation of strong winds still prevails over Sweden and the Gulf of Bothnia.

WEATHER

Fine and bright at the the German stations and on the eastern shore of the North Sea
Fair, but hazy over England, dull over Ireland and Scotland with rain in some places
Much rain has fallen over Sweden and also in the southeast of France

SEA

Smooth or nearly so on all our coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Some fresh disturbances appear to be approaching our western coasts from the Atlantic, but of their intensity very little is known at present.

FORECASTS

For the 24 hours ending at NOON on 20th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E	Varying S.W. winds; changeable. unsettled, some rain.
3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	Variable airs and S.W. breezes; fine and warm, unsettled later.

DISTRICTS.	FORECASTS
6 SCOTLAND WEST 7 ENGLAND N.W. 8 ENGLAND S.W. 9 IRELAND NORTH 0 IRELAND SOUTH	S.W. breezes, becoming unsettled rain at times, perhaps thunder.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* ( ), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* ( ), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesmes ...	29.60	55	48	NW 6	b	4	Holyhead ...	29.99	56	51	NW 2	o q	2
Sumburgh Head	29.75	52	50	NNW 3	c	3	Valencia	30.04	63	55	NW 3	bc v	3
Stornoway ...	29.84	56	54	N 1	o	2	Scilly	29.99	64	62	WSW 2	b	4
Aberdeen ...	29.84	59	52	NW 2	bc	3	Jersey	30.02	65	59	WNW 3	b	3
Shields	29.87	57	53	E 2	c	3	Dungeness ...	29.95	61	57	WSW 4	c	3
Ardrossan ...	29.90	59	55	NW 4	c	3	London	29.94	66	58	WNW 2	c	*
Malin Head ...	29.95	57	53	WNW 3	c	3	Yarmouth ...	29.92	61	60	NW 2	c	2
Mullaghmore ...	30.00	57	52	WNW 4	bc v	2	Rochefort ...	30.04	72	63	NW 3	bc	2
Belmullet ...	30.03	57	50	NW 2	o	*							

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30·0 ins: and upwards, in an anticyclone lying over the west and southwest of our Islands, the Bay of Biscay, western and central France and the Portuguese coast, as well as in another area lying over the south of Russia. The lowest readings, 29·4 ins: and less, were shown in a small, but well defined, depression lying off the coast of Pomerania, but other disturbances, with readings below 29·8 ins: were found respectively over the Gulf of Genoa and to the eastward of Scandinavia. The wind was light to fresh from the NWⁿᵈ over our Islands and the North Sea, strong from W. over North Germany, and light from the Sᵗʰ or SEᵗʰ over Sweden and Finland. In the west of France, however, light Eᵗʰ or NEᵗʰ breezes were reported, while over Southern Europe and the Mediterranean the wind was very variable. The weather was dull over Central Europe, with rain at some of the Danish and German stations, but fair or fine elsewhere. Temperature had risen a few degrees over Sweden and Russia, but fallen in most other countries, readings ranged from a little above 80° at Constantinople and some of the Mediterranean stations to 55° or less over the northern parts of the United Kingdom, the west of Norway, and the extreme north of Russia. The highest individual readings were 83° at Malta, 82° at Constantinople and Palma, 81° at Cagliari and Palermo, 80° at Brindisi, 79° at Lesina and La Galle, and 78° at Barcelona; the lowest were 49° at Sumburgh Hd., 50° at Archangel, Christiansund and Stavin, 51° at Bodo and 52° at Skudesmes, Stornoway, Wick, Aberdeen, York and Donaghadee.

In the course of the day the barometer fell a little in all parts of Western Europe, but no important change was observed in the winds. Showers were, however, experienced in the extreme north and northwest of our Islands.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Saturday, 20th July, 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	?	52	E	4	r	29.60	-.09	58	54	+ 3	SW	2	0	*	59	48	0.20
	Hernösand ...	29.50	55	N	0	c	29.69	+.31	58	52	+ 5	W	4	b	*	61	52	0.12
	Stockholm ...	29.67	59	NEW	4	c	29.85	+.42	62	55	+ 5	SW	4	b	*	64	50	-
	Wisby	29.78	60	SW	6	bc	29.93	+.35	60	55	+ 4	SW	6	b	*	68	54	-
	Bodö	29.61	58	SSW	2	0	29.63	-.03	58	52	- 2	SSW	1	b	1	63	58	-
	Christiansund...	29.71	49	WSW	4	0	29.75	+.15	51	47	+ 2	S	1	b	3	52	?	0.28
	Skudesnaes ...	29.72	55	SE	4	r	29.79	+.10	57	53	+ 4	SSE	6	0	4	61	50	0.24
	Christiania Fjord (Farder)	29.65	60	WSW	7	bc	29.78	+.28	58	54	0	WSW	4	b	3	64	55	-
	Skagen (The Scaw)	29.75	68	W	2	0	29.84	+.28	59	55	+ 4	WSW	2	0	2	61	54	-
	Fanö	29.85	58	SW	4	c	29.90	+.10	63	56	+ 6	WSW	4	b	*	64	55	-
BRITISH ISLANDS.	Sumburgh Head	29.66	51	W	1	c	29.70	+.04	52	49	+ 1	S	0	c	0	56	44	-
	Stornoway ..	29.70	52	SE	2	bc	29.65	-.04	52	51	0	SE	2	0	2	57	45	0.05
	Wick	29.70	53	NW	1	0	29.70	+.02	55	52	+ 1	SE	2	0	1	58	47	0.09
	Nairn	29.69	55	S	0	c	29.67	-.01	54	53	- 1	S	0	b	1	60	48	0.11
	Aberdeen... ...	29.71	55	NE	1	c	29.71	-.01	56	53	+ 1	ESE	1	c	1	63	51	0.34
	Leith	29.75	55	W	3	c	29.70	-.09	54	51	- 2	S	1	0	*	60	49	-
	Shields	29.79	58	WSW	2	c	29.73	-.08	54	51	- 2	SE	2	0	2	60	46	-
	Spurn Head ...	29.84	59	SE	3	c	29.79	-.09	59	55	+ 2	SW	3	0	3	62	53	-
	York	29.84	61	W	2	0	29.77	-.11	57	52	+ 3	S	1	c	*	63	47	-
	Loughborough	29.85	65	WSW	2	c	29.80	-.13	56	54	- 3	SSE	1	r	*	69	49	0.01
	Ardrossan ...	29.76	54	SW	4	0	29.68	-.11	58	54	+ 2	SE	3	0	2	60	51	-
	Malin Head ...	29.77	55	W	2	0	29.63	-.18	55	51	+ 3	SSW	3	0	1	57	50	0.05
	Mullaghmore ...	29.78	57	WNW	1	0	29.61	-.26	55	53	+ 3	ESE	4	0	3	60	51	0.02
	Belmullet ...	29.81	59	SW	1	0	29.59	-.28	56	54	0	E	1	0	*	61	43	-
	Donaghadee ...	29.80	56	SE	2	c	29.68	-.19	53	52	- 4	SE	2	r	0	61	52	0.03
	Barrow-in-Furness	29.82	58	SW	3	c	29.71	-.15	57	53	+ 2	ESE	5	0	*	61	54	-
	Liverpool (Bidston)	29.84	58	NW	1	bc	29.71	-.19	55	53	- 1	SE	2	0	3	64	51	0.01
	Holyhead ...	29.84	58	SSW	2	cg	29.66	-.24	54	53	- 3	SE	4	dm	4	64	53	0.06
	Parsonstown ...	29.79	62	N	0	c	29.57	-.35	55	54	+ 2	S	0	0	*	63	52	0.12
	Valencia	29.74	57	SE	1	rm	29.57	-.33	61	60	+ 4	NNW	1	cp	1	61	54	0.30
	Roche's Point...	29.80	60	SW	2	r	29.56	-.36	61	59	+ 5	WSW	4	0	4	66	54	0.35
	Pembroke ...	29.86	59	SW	3	bc	29.63	-.28	59	58	+ 1	SSW	4	cqp	4	62	53	0.34
	Scilly	29.87	62	SE	3	0	29.70	-.23	61	60	- 1	W	5	oq	5	67	54	0.26
	Prawle Point ...	29.89	59	WSW	2	bc	29.74	-.20	57	57	- 2	SSW	4	f	3	63	53	0.20
	Jersey	29.91	65	NNW	5	b	29.86	-.10	64	60	0	SSW	4	cq	3	69	58	-
	Hurst Castle ...	29.90	64	WSW	3	b	29.82	-.12	60	60	- 4	SW	3	r	1	67	59	0.01
	Dungeness ...	29.89	60	SW	4	bc	29.85	-.02	61	59	0	SSW	3	c	2	68	? 57	-
	London	29.87	59	SW	2	c	29.83	-.11	63	55	+ 5	SSW	2	0	*	71	52	-
	Oxford	29.86	61	W	1	b	29.80	-.14	57	55	+ 1	S	3	r	*	69	52	-
	Cambridge ...	29.84	64	S	1	c	29.81	-.13	63	58	+ 6	S	1	c	*	70	50	-
	Yarmouth ...	29.87	63	SSE	3	bcm	29.83	-.09	60	59	+ 4	S	2	bm	1	66	54	-
GERMANY.	Cuxhaven ...	29.92	59	WNW	2	b	29.92	+.04	60	58	+ 1	NE	3	m	*	65	58	-
	Berlin	29.99	63	S	1	b	29.95	-.04	62	57	+ 3	NE	4	c	*	70	57	-
	Wiesbaden ...	*	*	*	*	*	29.94	-.08	62	57	+ 6	E	2	c	*	70	?	-
	Munich	29.91	63	SW	2	c	29.90	-.12	56	56	- 1	NW	3	r	*	70	55	0.16
FRANCE & NETHERLANDS.	The Helder ...	29.91	61	W	1	b	29.88	-.03	62	59	+ 3	SSE	1	b	1	64	54	-
	Brussels	*	*	*	*	*	29.91	-.06	64	58	+ 5	S	2	0	*	72	59	-
	Cape Gris Nez...	?	63	SW	1	b	?	?	59	54	0	S	1	c	0	68	54	-
	Paris	29.89	71	E	1	b	29.95	-.02	61	56	+ 3	S	2	bc	*	78	51	-
	Brest	?	62	N	1	b	?	?	61	60	- 3	SW	5	r	5	66	52	0.08
	Lorient	29.95	62	W	3	c	29.92	-.04	63	61	+ 6	SW	4	0	3	68	55	-
	Rochefort ...	29.95	69	NW	4	b	30.04	+.10	65	63	+ 5	S	1	b	2	81	55	-
	Belfort	29.96	63	W	2	0	30.00	+.04	59	54	+ 2	W	1	c	*	70	53	0.20
	Lyons	29.94	57	NNW	1	r	30.03	+.10	57	52	0	SSW	1	b	*	63	50	0.39
	Nice...	29.87	68	E	1	0	29.81	-.06	69	61	0	NE	2	b	0	79	59	0.12
	Perpignan ...	29.91	66	NW	2	0	30.02	+.16	66	61	+ 2	NW	2	b	*	69	59	0.08
	Biarritz	29.96	73	NW	2	b	30.03	+.12	68	62	+ 8	SE	2	b	1	75	60	-
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	29.99	66	SW	4	f	30.05	+.08	66	65	+ 2	SW	2	f	5	68	?	0.08

For Explanation of Columns, see p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on *Saturday, 20th July.* 1889.

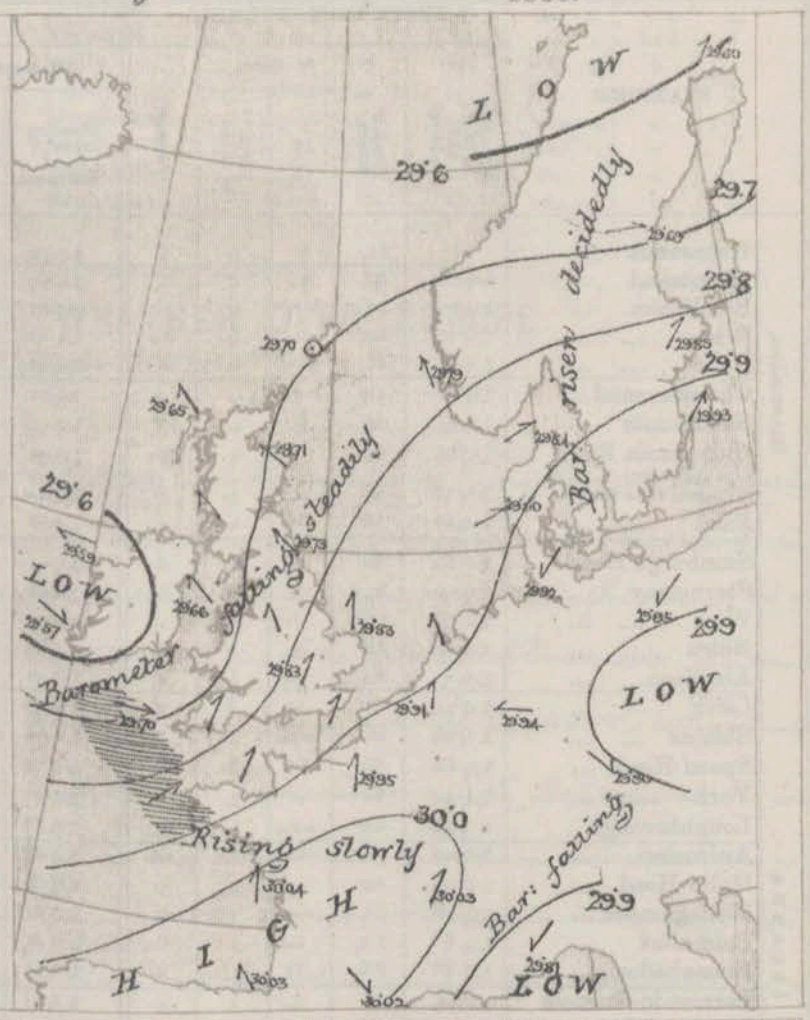
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.

WIND - Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shown thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

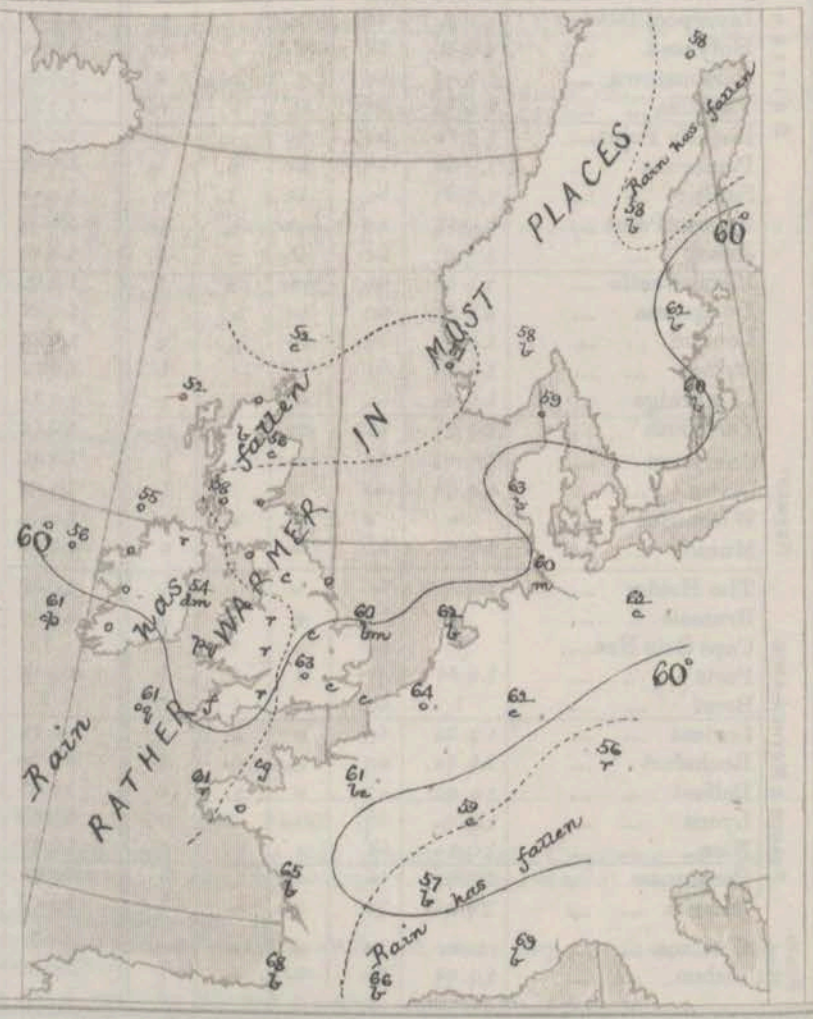
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

TEMPERATURE, & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·09
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·05 ins. to about 29·90 ins. over Spain, France, Germany and the Baltic.
Lowest, 29·6 ins. and less, over Ireland and Lapland.
Gradients moderate over our southwestern districts, slight elsewhere.
Barometer falling over the greater part of our Islands, rising elsewhere. A rise has commenced, even at Valencia since 5 a.m.

TEMPERATURE

Highest, 69° at Nice, 68° at Biarritz, 65° at Rochefort, 64° at Brussels, 63° at Paris and in London, and 62° at Stockholm.
Lowest, 52° at Stornoway and Lumburgh Head, 54° at Leith, Shields and Holyhead, 55° at Malin Head and Parsonstown.
It rose to 70° at Cambridge and 71° in London yesterday, but the daily maxima yesterday was below 70° at all our other stations.

WIND

Moderate from W. in the south of Ireland — from SSW and S over England and the west of France, from SE. over Scotland, the north of Ireland and Irish Sea.
Over Scandinavia it is S. and SW. and over Germany variable.

WEATHER

Fine and bright in the southwest and south of France and also in Sweden.
Cloudy and unsettled elsewhere, with rain in several places.
Rain has fallen very generally over Ireland and Scotland, and also over Southern Europe and the north of Sweden.

SEA

Rather rough at Scilly, moderate at many of our eastern stations, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

As the depression in the west moves northeastwards other secondary disturbances are likely to appear, and showery changeable weather seems probable generally, with thunder in a few places.

FORECASTS

For the 24 hours ending at NOON on 21st JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST 2 ENGLAND N.E	SE. and S. winds, moderate; showery. thunder locally.
3 ENGLAND EAST	Same as No 5.
4 MIDLAND COUNTIES	S. winds, moderate, showery, thunder locally.
5 ENGLAND SOUTH	SW. winds, light to moderate; some showers, bright intervals.

DISTRICTS.	FORECASTS
6 SCOTLAND WEST 7 ENGLAND N.W.	S. winds, moderate; showery.
8 ENGLAND S.W.	Same as No 5.
9 IRELAND NORTH 0 IRELAND SOUTH	Varying breezes; changeable, showery.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesnaes ...	29.74	61	53	WSW 2	o	2
Sumburgh Head	29.66	54	51	WNW 1	bc	1
Stornoway ...	29.71	55	52	NE 1	o	2
Aberdeen ...	29.71	66	54	SE 1	cp	2
Shields	29.80	59	53	W 3	o	2
Ardrossan ...	29.79	57	54	SW 4	o	3
Malin Head ...	29.80	56	52	NW 3	o	3
Mullaghmore ...	29.84	57	52	W 3	ov	2
Belmullet ...	29.83	60	55	W 2	o	*

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Holyhead ...	29.88	63	54	SW 2	bc	1
Valencia	29.84	59	55	SE 4	o	4
Scilly	29.92	66	62	Zo 0	c	2
Jersey	29.95	67	60	NNE 2	b	2
Dungeness ...	29.92	61	58	WSW 4	c	3
London	29.91	69	59	SSW 2	c	*
Yarmouth ...	29.91	62	61	NE 3	b	2
Rochefort ...	29.95	75	66	NW 4	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

Continental Information not received.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Sunday 21st JULY *1889*

Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING.					8 A.M. TO DAY.									PAST 24 HOURS.		
				Wind.			Barometer.		Shade Temp.			Wind.				Shade Temp.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	Direc.	Force. (0 to 12.)	Weather.	Reading at 32° F and Sea Level.	Difference from 8 a.m. yesterday.	Dry.	Wet.	Difference from 8 a.m. yesterday.	Direc.	Force. (0 to 12.)	Weather.	Sea. 0 to 9.)	Max.	Min.	Amount of Rainfall.
Scandinavia.	Haparanda ..	29.73	51	SE	2	c	29.79	+ .19	55	53	— 3	NE	2	o	*	61	50	—
	Hernösand ...	29.84	59	2	o	b	29.91	+ .22	59	52	+ 1	2	o	bc	*	73	48	—
	Stockholm ...	29.91	59	2	o	b	29.93	+ .08	64	56	+ 2	E	2	o	*	68	52	—
	Wisby	29.95	59	SSW	4	c	29.92	— .01	63	54	+ 3	ESE	2	b	*	73	54	—
	Bodö	29.80	55	2	o	o	29.90	+ .27	52	51	— 6	S	1	r	o	59	50	0.43
	Christiansund...	29.84	56	ENE	2	bc	29.77	+ .02	59	52	+ 6	ENE	3	b	2	59	48	—
	Skudesnaes ...	29.79	60	SSE	6	o	29.61	— .18	56	53	— 1	ESE	6	o	4	61	55	0.04
	Christiania Fjord (Feerder)	29.86	59	S	5	o	29.82	+ .04	61	58	+ 3	SE	4	m	2	61	58	—
	Skagen (The Scaw)	29.83	60	SE	1	o	29.75	— .09	62	59	+ 3	S	4	o	3	66	59	—
	Fanö	29.81	63	SSE	4	c	29.52	— .28	64	60	+ 1	SSE	6	c	*	68	59	—
British Islands.	Sumburgh Head	29.66	50	NE	3	o	29.52	— .18	55	55	+ 3	2	o	o	2	55	48	0.08
	Stornoway ..	29.60	54	S	1	o	29.48	— .17	56	54	+ 4	N	4	bc	3	54	47	0.05
	Wick	29.61	56	ESE	3	o	29.48	— .22	56	54	+ 1	NE	2	p	1	60	52	0.04
	Nairn	29.59	60	E	1	c	29.46	— .31	55	54	+ 1	2	o	m	1	60	47	0.02
	Aberdeen... ...	29.64	54	S	2	o	29.40	— .31	52	52	— 4	WNW	3	or	3	61	51	0.60
	Leith ...	29.58	53	SE	1	r	29.44	— .26	53	52	— 1	SW	1	om	*	58	51	0.32
	Shields	29.58	55	E	3	o	29.44	— .29	59	55	+ 5	?	2	cp	2	59	53	0.15
	Spurn Head ...	29.63	61	SSW	4	c	29.54	— .25	62	58	+ 3	SW	4	c	3	62	57	0.02
	York	29.61	61	S	2	o	29.52	— .25	60	57	+ 3	SW	1	c	*	62	55	0.10
	Loughborough	29.62	69	S	4	c	29.59	— .21	59	57	+ 3	SW	3	r	*	70	55	0.06
	Ardrossan ...	29.55	59	NE	1	0pm	29.45	— .23	56	54	— 2	NE	1	om	0	60	53	—
	Malin Head ...	29.56	53	ESE	4	or	29.43	— .20	55	55	0	S	2	or	:	56	52	0.16
	Mullaghmore ...	29.55	58	WSW	1	or	29.45	— .16	56	55	+ 1	WNW	4	op	3	63	54	0.27
	Belmullet ...	29.55	58	W	2	o	29.55	— .04	53	52	— 3	N	4	o	*	63	52	0.33
	Donaghadee ...	29.55	55	NE	2	o	29.47	— .21	58	57	+ 5	S	3	c	1	58	52	0.42
	Barrow-in-Furness	29.52	59	SE	4	r	29.49	— .22	57	53	0	SW	3	c	*	59	54	0.86
	Liverpool (Bidston)	29.52	62	SW	2	o	29.52	— .29	58	56	+ 3	S	1	op	3	64	54	0.15
	Holyhead ...	29.54	58	WSW	4	ogm	29.51	— .15	56	56	+ 2	WSW	3	cp	5	59	52	0.26
	Parsonstown ...	29.58	62	SW	1	o	29.50	— .07	56	55	+ 1	2	o	o	*	64	53	0.08
	Valencia	29.65	61	SW	3	o	29.63	+ .06	57	54	— 4	WNW	5	oq	5	65	54	0.35
	Roche's Point...	29.62	63	WNW	4	c	29.57	+ .01	60	56	1	W	4	bc	4	66	55	0.20
	Pembroke ...	29.60	59	SW	5	c	29.57	— .06	59	58	0	WSW	5	bcq	5	61	55	0.41
	Scilly	29.75	61	WSW	5	oq	29.68	— .02	60	59	— 1	WNW	5	cq	5	65	57	0.06
	Prawle Point ...	29.74	64	WSW	5	o	29.71	— .03	59	58	+ 2	WSW	5	c	4	62	55	0.20
	Jersey	29.84	63	W	4	bc	29.81	— .05	63	60	— 1	SW	5	bem	4	67	57	0.13
	Hurst Castle ...	29.75	61	WSW	6	c	29.70	— .12	59	59	— 1	SW	7	p	4	64	57	0.22
	Dungeness ...	29.76	61	SSW	6	r	29.71	— .14	61	58	0	WSW	6	c	5	66	58	0.03
	London	29.70	63	SW	3	c	29.67	— .16	62	57	— 1	SW	2	c	*	66	58	0.02
	Oxford	29.67	61	SSW	4	bc	29.63	— .17	58	56	+ 1	S	5	o	*	67	55	0.04
	Cambridge ...	29.70	62	S	2	c	29.62	— .19	62	58	— 1	SW	2	o	*	68	56	0.03
	Yarmouth ...	29.74	63	SSE	3	om	29.62	— .21	61	58	+ 1	SW	3	c	2	66	56	0.02
Germany.	Cuxhaven ...	29.88	61	E	2	t	29.76	— .16	62	60	+ 2	SSW	3	bc	*	67	59	0.08
	Berlin	29.90	70	NE	3	b	29.86	— .09	67	62	+ 5	WSW	1	b	*	75	61	—
	Wiesbaden ...	*	*	*	*	*	29.89	— .05	66	62	+ 4	SW	1	c	*	77	59	—
	Munich	30.06	58	SW	2	b	30.04	+ .14	63	58	+ 7	SW	4	b	*	64	50	—
France & Netherlands.	The Helder ...	29.79	61	SSE	1	c	29.62	— .26	63	59	+ 1	SW	2	o	3	73	59	0.08
	Brussels	*	*	*	*	*	29.78	— .13	61	59	— 3	SW	5	c	*	77	59	0.08
	Cape Gris Nez...	?	63	SSW	4	r	?	?	60	57	+ 1	W	6	c	6	70	59	0.04
	Paris	29.91	72	SW	3	o	29.88	— .07	64	60	+ 3	WSW	3	o	*	80	61	0.04
	Brest	?	62	W	3	o	?	?	60	?	+ 1	WSW	4	f	?	?	?	?
	Lorient	29.92	63	W	3	c	29.89	— .03	62	59	— 1	W	5	c	4	66	59	0.04
	Rochefort ...	30.04	70	SW	4	o	29.99	— .05	68	66	+ 3	WSW	4	o	2	?	59	—
	Belfort	30.00	63	E	1	b	29.96	— .04	61	52	+ 2	W	1	c	*	75	52	—
	Lyons	29.99	72	E	1	b	30.00	— .03	64	59	+ 7	E	1	b	*	75	55	—
	Nice...	29.87	73	SE	4	b	29.97	+ .16	70	65	+ 1	2	o	b	1	79	61	—
	Perpignan ...	30.00	74	2	o	b	30.00	— .02	72	67	+ 6	E	1	b	*	81	60	—
	Biarritz	30.00	75	NNE	3	b	30.02	— .01	68	66	0	WSW	3	c	1	82	66	—
Peninsula.	Corunna	*	*	*	*	*	30.11	+ .06	63	62	— 2	NW	3	f	2	72	61	—
	Lisbon	30.07	68	WNW	3	b	30.11	+ .06	65	62	— 1	NNW	3	o	2	72	63	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2*

WEATHER CHARTS

for 8 a.m. on Sunday 21st JULY 1889.

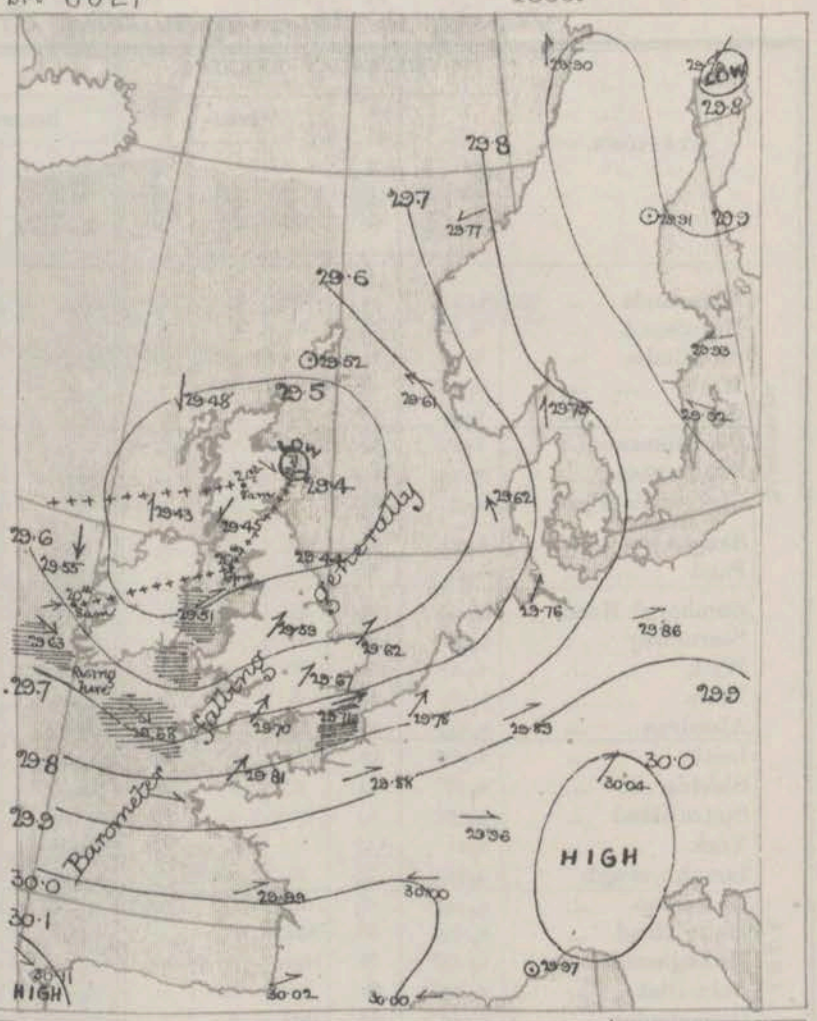
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

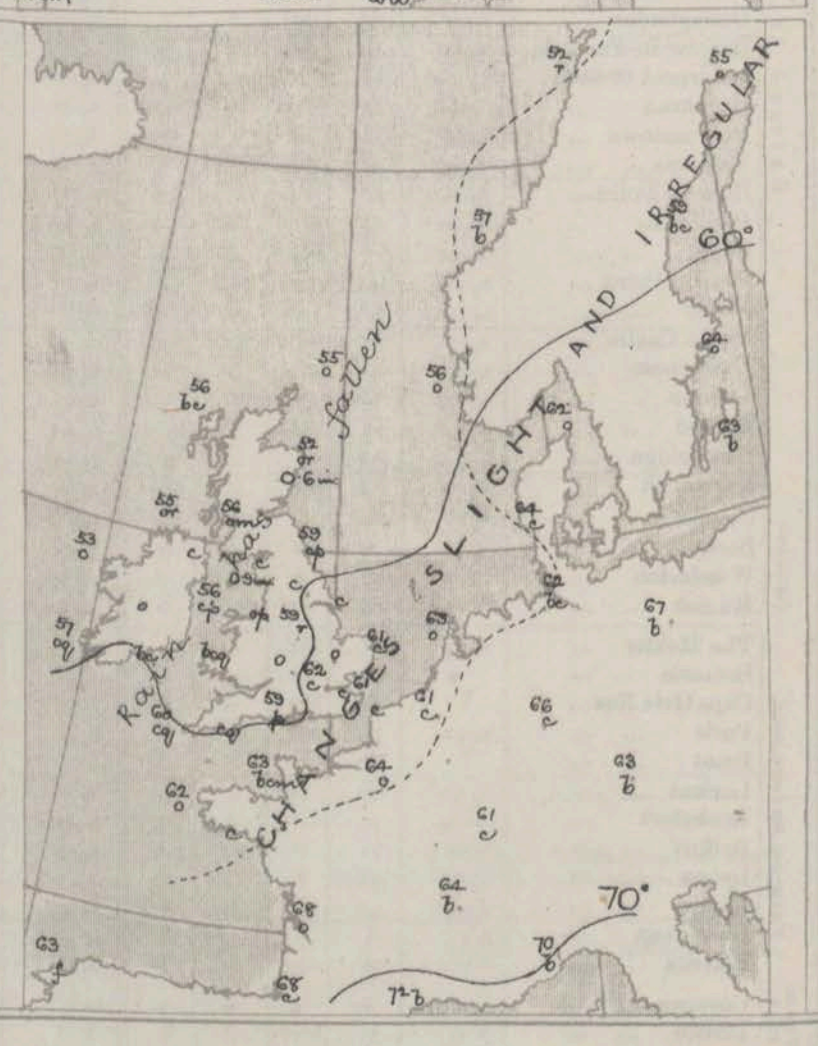
STATIONS.	MEAN READINGS. ●
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 860
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 0	54 · 7	58 · 2	54 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30·1ins. to 30·0ins. and more over Spain and the southwest of France — 29·9ins. and more over Sweden.
Lowest 29·5ins. and less in a large irregular depression lying over Scotland and the north of Ireland — 29·4 ins at Aberdeen.
Gradients slight in the extreme south, moderate in most other places rather steep over the S of England, Channel & N of France.
Barometer unsteady — rising over northern Europe, and at Valencia, and in the southwest of Spain, falling elsewhere.

TEMPERATURE

Highest 68° at Biarritz and Rochefort, 67° at Berlin, 64° at Paris and Stockholm, 62° at Brest and in London.
Lowest 52° at Bodö and Aberdeen, 53° at Leith and Belmullet, 55° at Malin Head, Nairn, Stornoway, Kirkwall and Haparanda, 56° at Stornoway & Thurso.
It rose to 70° in the shade at Loughborough yesterday but did not reach that value at any of our other stations.

WIND

Moderate to strong from North on our extreme northwestern coasts — from W at our southwestern stations.
From WSW in the Channel — from S in Denmark — from SE and E. in Norway.
In the northeast of England it was light from SW, and in the east of Scotland NW 7.

WEATHER

Changeable, squally, and showery over northwestern Europe as a whole. In some localities the showers have been heavy, and at Cuxhaven thunder has occurred.

SEA

Rather rough on our western and southern coasts, slight or smooth in the northeast and east.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 22ND JULY 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	NONE ISSUED	6 SCOTLAND WEST	NONE ISSUED
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		0 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesnaes ...	29.82	60	55	SSE	6	c	4
Sumburgh Head	29.81	50	50	E	1	r	1
Stornoway ...	29.63	55	52	SE	1	c	2
Aberdeen ...	29.78	55	52	SSE	2	o	2
Shields	29.65	58	54	SSE	2	r	2
Ardrossan ...	29.62	58	56	NE	1	r	1
Malin Head ...	29.60	53	51	ESE	4	o	2
Mullaghmore ...	29.55	61	57	NE	2	cm	2
Belmullet ...	29.60	62	56	W	2	o	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	29.56	59	58	SSW	4	dg	4
Valencia	29.67	62	59	W	4	op	4
Scilly	29.74	60	60	WSW	5	oq	5
Jersey	29.85	63	61	W	3	o	3
Dungeness ...	29.82	60	59	SW	4	r	3
London	29.74	63	60	SSW	3	op	*
Yarmouth ...	29.77	63	62	SE	3	c	2
Rochefort ...	30.06	73	66	W	4	bc	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure varied between 30.0 ins. and 30.1 ins. and more over Russia, and exceeded 30.0 ins. over Algeria, Spain and the southwest of France – the two high pressure systems being separated by lower values over Germany, Austria northern Italy and the Mediterranean. The lowest values (29.6 ins. and less) were found in a depression lying over Lapland, and in a new one advancing over the western parts of our Islands from the Atlantic. The wind, which was light and very variable over southwestern, central and eastern Europe was moderate from SW. and S. over the Channel, England, the North Sea and the Baltic, and SE by E over the northern parts of our Islands, but had already veered to the W^ward in the south of Ireland, after blowing freshly from the S^ward in the night. The weather was fine and bright over Russia and Sweden, as well as over the southwestern countries of Europe, but was becoming unsettled and showery over the United Kingdom and its neighbourhood, the rainfall at the Irish stations being already considerable. Temperature was low over central Europe, and rather so in several parts of the United Kingdom, but continued high over the southern parts of the Mediterranean and southeastern Europe. The highest individual values were 90° at Sfax (Tunis) 82° at Palermo, 81° at Aumale, Cagliari, Brindisi and Lesina, 80° at Constantinople, 78° at Rome, 75° at Sanguinaire and Pesaro, 74° at Leghorn, 73° at Nicolaieff. The lowest were 51° at Christiansund, 52° at Sumburgh Head and Stornoway, 54° at Nairn, Leith, Shields and Holyhead, 53° at Malin Head and Liverpool, 56° at Munich and Limoges, 57° at Breslau, 58° at Le Mans, and 59° at Belfort and Prague.

Showery weather became general over the United Kingdom later on as the depression (which proved to be complex in form) advanced eastwards.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Monday 22nd July 1889

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.84	56	W	2	b	29.88	+ .09	54	52	— 1	S	2	o	*	63	50	—
	Hernösand ...	29.88	56	Z	o	b	29.81	— .10	57	55	— 2	S	2	b	*	70	46	—
	Stockholm ...	29.80	58	ESE	2	bc	29.64	— .29	59	57	— 5	N	2	o	*	73	54	—
	Wisby	29.77	60	ESE	4	o	29.57	— .35	59	57	— 4	NNE	6	o	*	70	52	0.04
	Bodö	29.88	54	N	2	b	29.79	— .11	64	56	+ 12	E	2	b	1	?	50	—
	Christiansund...	29.40	65	SE	2	bc	29.54	— .23	66	59	+ 9	ESE	4	c	2	68	55	—
	Skudesnaes ...	29.50	60	SSE	6	r	29.47	— .14	60	57	+ 4	SE	4	c	3	61	55	0.79
	Christiania Fjord (Færder)	29.67	63	ENE	3	o	29.57	— .25	60	58	— 1	SE	6	o	3	63	59	0.35
	Skagen (The Scaw)	29.61	61	S	4	o	29.52	— .23	59	58	— 3	S	3	c	2	64	57	1.18
	Fanö	29.60	60	SW	4	c	29.50	— .12	59	58	— 5	SW	4	r	*	68	57	0.24
BRITISH ISLANDS.	Sumburgh Head	29.36	56	NE	1	b	29.43	— .09	52	51	— 3	WNW	2	o	2	59	50	0.21
	Stornoway ..	29.53	53	NW	5	c	29.51	+ .03	55	51	— 1	NW	4	bc	4	57	44	0.04
	Wick	29.45	52	N	3	r	29.51	+ .03	55	51	— 1	N	4	c	2	59	40	0.43
	Nairn	29.47	57	W	3	o	29.55	+ .09	55	54	0	SW	1	c	1	63	48	0.03
	Aberdeen... ...	29.43	52	WNW	4	o	29.58	+ .18	58	58	+ 6	SW	2	c	1	58	44	0.95
	Leith	29.46	58	E	1	o	29.64	+ .20	56	52	+ 3	W	3	c	*	67	47	0.12
	Shields	29.46	58	S	1	o	29.68	+ .24	55	52	— 4	W	3	bc	2	66	47	0.39
	Spurn Head ...	29.49	61	WSW	2	bc	29.73	+ .19	56	51	— 6	WNW	6	b	4	64	50	0.20
	York	29.49	62	SW	1	c	29.76	+ .24	59	52	— 1	W	3	b	*	66	48	0.14
	Loughborough	29.54	61	WSW	1	c	29.82	+ .23	57	53	— 2	WNW	4	bc	*	70	48	0.15
	Ardrossan ...	29.52	56	N	6	r	29.67	+ .22	55	53	— 1	SW	4	c	3	63	51	0.10
	Malin Head ...	29.62	54	NNW	5	bc	29.66	+ .23	54	52	— 1	WSW	5	bcpq	4	56	51	0.22
	Mullaghmore ...	29.74	55	NW	6	c	29.75	+ .30	54	52	— 2	WSW	5	cp	5	59	51	0.26
	Belmullet ...	29.74	50	NW	5	bc	29.77	+ .22	56	52	+ 3	W	3	c	*	58	52	0.04
	Donaghadee ...	29.59	52	NNE	5	r	29.75	+ .28	57	54	— 1	W	4	c	2	62	51	0.52
	Barrow-in-Furness	29.49	58	SW	4	bc	29.75	+ .26	55	52	— 2	NW	5	bc	*	60	51	0.08
	Liverpool (Bidston)	29.53	58	W	5	c	29.80	+ .28	56	52	— 2	W	5	c	4	62	51	0.40
	Holyhead ...	29.55	56	WNW	6	o	29.83	+ .32	55	53	— 1	W	4	cg	4	61	51	0.04
	Parsonstown ...	29.77	58	NW	2	bc	29.85	+ .35	55	51	— 1	NW	2	bc	*	63	48	0.04
	Valencia	29.91	59	NW	3	b	29.93	+ .30	58	55	+ 1	W	3	c	3	62	49	0.10
	Roche's Point...	29.81	60	NNW	5	b	29.94	+ .37	58	54	— 2	W	3	c	3	62	51	—
	Pembroke ...	29.72	57	WNW	6	c	29.91	+ .34	56	54	— 3	W	4	c	4	61	53	—
	Scilly	29.82	61	WNW	6	c	29.96	+ .28	60	57	0	NW	4	b	4	63	57	—
	Prawle Point ...	29.74	60	WSW	6	b	29.96	+ .25	60	55	+ 1	W	3	b	2	61	49	0.06
	Jersey	29.84	63	WSW	6	c	29.99	+ .18	61	53	— 2	WNW	3	bc	3	67	55	—
	Hurst Castle ...	29.69	63	WSW	7	c	29.93	+ .23	59	58	0	W	3	b	4	66	54	0.01
	Dungeness ...	29.66	63	WSW	7	bc	29.86	+ .15	61	53	0	WNW	6	bc	5	66	53	—
	London	29.62	59	SW	2	r	29.88	+ .21	56	57	— 6	WNW	2	bc	*	69	50	0.47
	Oxford	29.65	59	WSW	4	b	29.89	+ .26	56	52	— 2	W	3	bv	*	69	47	0.03
	Cambridge ...	29.63	62	WSW	2	c	29.84	+ .22	57	57	— 5	W	2	b	*	69	56	0.03
	Yarmouth ...	29.55	61	WSW	3	o	29.73	+ .11	54	52	— 7	WNW	3	og	2	68	56	0.52
GERMANY.	Cuxhaven ...	29.68	63	WNW	3	r	29.62	— .14	60	59	— 2	SW	6	r	*	68	59	0.24
	Berlin	29.73	63	Z	o	c	29.76	— .10	65	61	— 2	WSW	5	r	*	79	57	0.35
	Wiesbaden ...	*	*	*	*	*	29.88	— .01	64	59	— 2	SW	3	bc	*	72	48	0.08
	Munich	29.96	68	W	5	c	30.03	— .01	64	60	+ 1	SW	4	o	*	75	59	0.16
FRANCE & NETHERLANDS.	The Helder ...	29.62	63	SW	5	o	29.65	+ .03	61	56	— 2	WSW	4	o	4	68	59	—
	Brussels	*	*	*	*	*									*			
	Cape Gris Nez...	?	61	W	7	bc	?	?	56	51	— 4	WNW	6	b	6	66	55	—
	Paris	29.84	72	SW	3	b	29.99	+ .11	60	55	— 4	WSW	2	bc	*	?	57	—
	Brest	?	63	W	4	o	?	?	60	58	0	W	2	o	2	64	54	—
	Lorient	29.96	63	W	6	bc	30.00	+ .11	59	55	— 3	Z	0	bc	2	64	57	0.08
	Rochefort ...	30.05	68	WNW	5	c	30.08	+ .19	64	60	— 4	NW	3	bc	2	72	59	—
	Belfort	29.97	65	W	4	r	30.07	+ .05	61	54	0	W	2	c	*	70	56	0.28
	Lyons	29.96	71	N	1	c	30.05	+ .05	62	57	— 2	NE	1	o	*	76	60	—
	Nice...																	
	Perpignan ...	29.95	79	E	2	b	30.00	.00	70	66	— 2	NW	2	o	*	82	69	—
	Biarritz	30.06	87	N	3	o	30.06	+ .04	66	64	— 2	SSE	1	o	1	75	63	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.06	67	NNW	5	b	30.09	— .02	65	57	0	NNW	4	bc	2	77	61	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2*

WEATHER CHARTS

for 8 a.m. on *Monday, 22nd July* 1889.

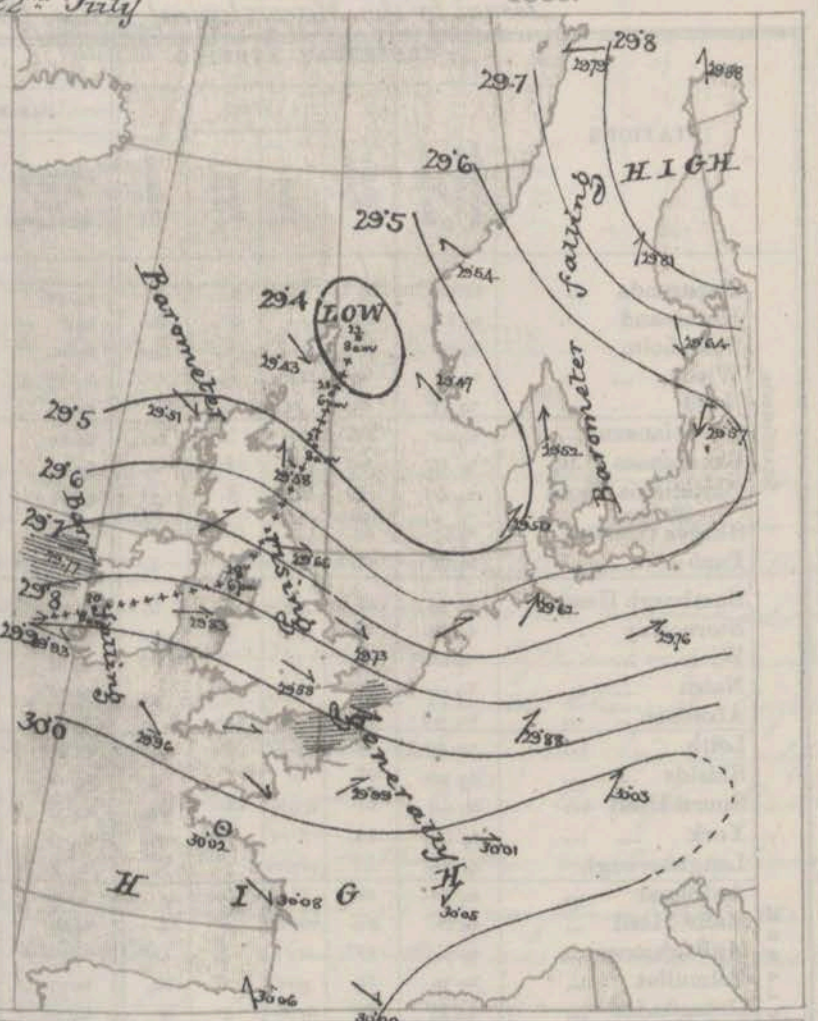
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

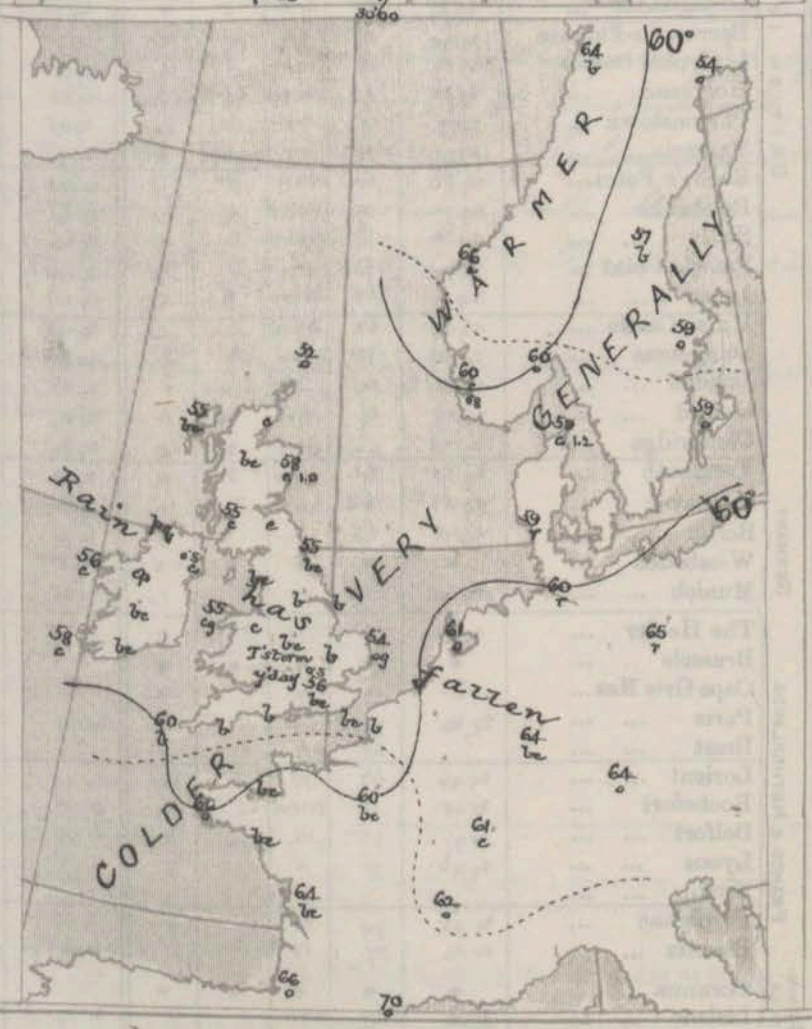
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 824
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 0	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.0 in. and upwards, over France, Spain and South Germany; 29.8 in. and upwards, over the north of Sweden.
Lowest, 28.4 in. and less, in a depression lying to the northeast of the Shetlands.
Gradient moderate. Barometer rising at all but the Scandinavian and Danish stations.

TEMPERATURE

Highest, 70° at Perpignan, 66° at Christiansund and Biarritz, 65° at Berlin and Lisbon and 64° at Bodö, Wiesbaden, Yarmouth and Rochefort.
Lowest, 52° at Lerwick Head & 54° at Haparanda, Malin Head, Belmullet and Yarmouth.
The highest maxima registered over our islands yesterday were 70° at Loughborough and 69° at Oxford, Cambridge and in London.

WIND

Moderate from the NW. in the north of Scotland and from the W.rd in other parts of the United Kingdom.
Moderate to strong from SW. in Denmark and Germany and from S. or SE. in Scandinavia.
Variable in the west and south of France; moderate from NNW. at Lisbon.

WEATHER

Fair generally, but rainy in North Germany & the South of Denmark and showery in the north of Ireland.
Since yesterday morning 0.5 in. of rain has fallen at Donaghadee, Yarmouth & in London, 0.8 in. at Stornoway, 1.0 in. at Aberdeen & 1.2 in. at Skegness.
Thunderstorms occurred yesterday in many parts of England.

SEA

Rough in the Straits of Dover, but moderate to smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The barometer is now beginning to fall again on the west coast of Ireland and Scotland, and fresh disturbances are evidently approaching from the Atlantic. An early renewal of unsettled weather is therefore probable in nearly all parts of the Kingdom.

FORECASTS

For the 24 hours ending at NOON on 23rd JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	Wind backing to the S.rn or SE.rn; fair to unsettled and some rain.
1 SCOTLAND EAST	W.ly to SW.ly or S.ly winds, moderate; fair to unsettled, and some rain.
2 ENGLAND N.E	
3 ENGLAND EAST	W.ly to SW.ly winds, freshening; fair to showery.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	Same as No. 1 and 2.
7 ENGLAND N.W.	
8 ENGLAND S.W.	Same as No. 3 to 5.
9 IRELAND NORTH	Wind backing to the SW.rn or S.rn and freshening; unsettled, some rain.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesmaes ...	29.53	60	58	SE 6	r	4
Sumburgh Head						
Stornoway ...	29.81	55	53	NW 4	be	4
Aberdeen ...						
Shields						
Ardrossan ...						
Malin Head ...	29.54	52	50	NNW 6	•	4
Mullaghmore ...						
Belmullet ...	29.74	58	50	NW 5	be	*

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Holyhead ...						
Valencia						
Scilly						
Jersey	29.87	66	61	WNW 6	b	5
Dungeness ...	29.67	65	61	WSW 7	be	6
London						
Yarmouth ...						
Rochefort ...	30.03	71	65	NW 4	be	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest (30.0 ins. to 30.1 ins.) over Russia, and also over the Spanish Peninsula and southwest of France – the two high pressure systems being separated by a low pressure band which extended from North Germany in a southeasterly direction across Hungary, Poland, western Russia and the Balkan Peninsula. It was lowest (29.5 ins. and less) in a depression of irregular form lying over Scotland and the north of Ireland, and rather low (29.8 ins. and less) in another system at the northern extremity of the Gulf of Bothnia. Gradients were slight over eastern, central and southern Europe, moderate to rather steep in the northwest. The wind over the southwestern, southern, central, eastern and northern countries was light to moderate in force, but variable in direction, while a well marked cyclonic circulation of moderate to strong breezes prevailed over the British Islands the North of France and the North Sea. The weather was fine in the south, southeast, and east, cloudy and changeable elsewhere (especially over the British Islands) with showers in very many places. At Barrow-in-Furness, Aberdeen, Breslau, Lemberg and Buda Pesth the rainfall measured in the morning was large. Thunder and lightning had occurred at Hamburg. Temperature continued rather low over the United Kingdom and its neighbourhood. It varied from between 70° and 85° on the shores of the Mediterranean, to less than 60° over the greater part of the United Kingdom and Scandinavia, and to as low as 52° at Aberdeen and Bodö. The highest morning values were 85° at Sfax (Tunis) 83° at Algiers, 82° at La Galle, 81° at Cagliari and Brindisi, 80° at Barcelona and Constantinople, 78° at Lesina, Trieste and Leghorn, 72° at Perpignan, and 70° at Nice. The lowest were 52° at Aberdeen and Bodö, 53° at Belmullet and Leith, 55° at Malin Head, Sumburgh Head and Haparanda, 56° at Skudesnaes, Ardrossan and Parsonstown.

Showery weather prevailed very generally over northwestern Europe during the day, the rainfall in several localities being heavy; thunder and lightning were observed over England, most in the southeast, and temperature was low and unsteady.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD

FROM THE 14TH TO THE 20TH JULY 1889.

The weather experienced over the United Kingdom during the past week has been very changeable, and rather cold for the time of year. From Sunday to Wednesday there were occasional showers in all parts of the Kingdom; thunderstorms occurred frequently in the south and east, and on Tuesday they were experienced in almost all districts. The rainfall, however, was not large as a rule, but about half an inch fell at the Channel stations between Tuesday evening and Wednesday morning, as a small depression moved eastwards over the districts named.

The weather then improved in the west, and the drier, warmer conditions spread gradually to the English stations also, as the depression which had caused the rain travelled away to the northeastward, and pressure became more uniform.

At the close of the week, however, a fresh series of depressions was advancing towards us from the westward, and, with a shift of wind to SW and SE showers were again becoming general – but not heavy, and were accompanied by very little thunder.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

• AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Tuesday, 23rd July, *1889*

Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.77	62	NE	2	b	~~29.[illegible]~~	— .19	65	61	+ 11	ENE	2	bc	*	70	48	—
	Hernösand ...	29.69	60	NNE	4	bc	29.47	— .34	57	56	0	NNE	6	r	*	73	44	0.32
	Stockholm ...	29.36	55	NNW	2	r	29.42	— .22	54	53	— 5	WSW	2	r	*	64	54	1.22
	Wisby	29.63	58	SSW	2	bc	29.56	— .01	60	58	+ 1	SW	2	c	*	66	55	—
	Bodö	29.73	65	ENE	2	c	29.73	— .06	67	57	+ 3	E	2	b	1	70	55	—
	Christiansund...	29.52	67	ESE	1	bc	29.57	+ .03	62	56	— 4	2	0	m	0	70	57	—
	Skudesnaes ...	29.60	56	W	6	o	29.71	+ .24	58	53	— 2	WSW	2	c	3	61	52	—
	Christiania Fjord (Farder)	29.58	62	E	4	o	29.61	+ .04	63	59	+ 3	WNW	2	bc	2	?	57	0.63
	Skagen (The Scaw)	29.53	61	2	0	o	29.63	+ .11	60	57	+ 1	NW	3	o	2	70	57	—
	Fanö	29.73	56	W	6	bc	29.78	+ .28	60	57	+ 1	WNW	4	cp	*	64	55	0.12
BRITISH ISLANDS.	Sumburgh Head	29.54	55	WNW	2	bc	29.66	+ .29	55	53	+ 3	WNW	1	c	1	59	48	—
	Stornoway ..	29.58	55	N	3	c	29.66	+ .15	57	54	+ 2	2	0	b	2	66	? 47	—
	Wick	29.61	55	N	3	o	29.69	+ .18	57	55	+ 2	SE	2	bc	1	62	45	0.02
	Nairn	29.57	63	W	2	b	29.66	+ .11	54	50	— 1	2	0	bc	1	65	43	0.01
	Aberdeen... ...	29.62	56	NW	1	c	29.69	+ .11	57	53	— 1	WNW	1	b	1	68	44	0.17
	Leith ...	29.66	57	W	2	c	29.69	+ .05	59	54	+ 3	S	1	c	*	64	46	—
	Shields	29.71	61	WSW	3	c	29.70	+ .02	55	52	0	SSW	2	c	2	64	47	—
	Spurn Head ...	29.79	61	SW	3	bc	29.75	+ .02	58	54	+ 2	S	1	c	3	62	51	—
	York	29.78	60	SW	1	o	29.74	— .02	55	52	— 4	S	1	bc	*	64	48	0.04
	Loughborough	29.83	60	W	2	c	29.77	— .05	57	54	0	SW	2	c	*	65	48	—
	Ardrossan ...	29.66	54	SSW	4	cp	29.68	+ .01	59	55	+ 4	SSW	1	b	1	59	52	0.14
	Malin Head ...	29.60	56	WSW	4	cp	29.63	— .03	55	52	+ 1	SE	2	b	2	59	49	0.09
	Mullaghmore ...	29.69	54	WSW	5	c	29.62	— .13	56	53	+ 2	WNW	5	cp	4	59	50	0.52
	Belmullet ...	29.72	54	WNW	4	cp	29.68	— .09	55	52	— 1	WNW	3	o	*	57	51	0.50
	Donaghadee ...	29.70	58	SW	3	c	29.67	— .08	56	53	— 1	S	3	bc	1	64	52	0.02
	Barrow-in-Furness	29.75	58	S	6	bc	29.70	— .05	54	52	— 1	SW	4	cp	*	60	52	0.44
	Liverpool (Bidston)	29.78	59	WSW	3	bc	29.72	— .08	59	52	+ 3	S	2	c	3	64	51	—
	Holyhead ...	29.79	55	NW	4	cpq	29.69	— .14	57	54	+ 2	SW	4	bc	4	61	52	0.02
	Parsonstown ...	29.77	57	2	0	bc	29.68	— .09	54	52	— 1	SW	1	o	*	62	50	0.19
	Valencia	29.86	54	W	2	cp	29.84	— .09	55	53	— 3	WNW	4	cmp	4	63	51	0.35
	Roche's Point...	29.85	58	WNW	3	bc	29.77	— .17	55	53	— 3	W	4	p	4	61	50	0.15
	Pembroke ...	29.85	57	WSW	4	bc	29.76	— .15	56	54	0	W	3	c	3	60	53	0.02
	Scilly	29.93	58	SW	4	cp	29.83	— .13	59	56	— 1	WNW	5	cq	4	63	53	0.24
	Prawle Point ...	29.92	59	SW	3	b	29.82	— .14	57	53	— 3	WSW	3	bc	2	61	52	—
	Jersey	29.97	62	W	3	cq	29.89	— .10	59	55	— 2	W	5	bcm	4	66	56	—
	Hurst Castle ...	29.91	62	WSW	5	b	29.81	— .12	57	57	— 2	WSW	5	cp	4	? 65	53	0.14
	Dungeness ...	29.90	61	WSW	5	bc	29.82	— .04	59	55	— 2	WSW	5	o	4	67	56	—
	London	29.88	63	SW	2	br	29.81	— .07	58	53	+ 2	WSW	1	o	*	66	50	—
	Oxford	29.86	58	SW	4	o	29.80	— .09	55	53	— 1	SW	1	bcp	*	66	51	—
	Cambridge ...	29.86	62	SW	1	bc	29.81	— .03	57	55	0	SW	1	o	*	65	48	0.01
	Yarmouth ...	29.83	64	SW	2	bcm	29.82	+ .09	58	57	+ 4	SSW	1	bm	1	64	? 54	—
GERMANY.	Cuxhaven ...	29.77	60	W	5	r	29.85	+ .23	61	59	+ 1	WSW	3	b	*	63	59	0.22
	Berlin	29.86	63	WNW	5	bc	29.94	+ .18	58	54	— 7	WNW	3	bc	*	73	52	—
	Wiesbaden ...	*	*	*	*	*	29.91	+ .03	59	55	— 5	W	1	o	*	70	50	—
	Munich	30.03	64	N	1	c	30.16	+ .13	56	56	— 8	NW	3	r	*	72	52	0.04
FRANCE & NETHERLANDS.	The Helder ...	29.87	59	WSW	1	b	29.84	+ .19	56	55	— 5	SSW	1	r	1	61	50	0.16
	Brussels .. ... 9 am	*	*	*	*	*	29.89	+ .03	56	52	— 3	SSW	2	o	*	68	53	—
	Cape Gris Nez...	?	60	WSW	4	b	?	?	58	54	+ 2	S	2	c	1	63	54	—
	Paris	29.96	66	W	2	o	29.89	— .10	60	56	0	SSW	1	o	*	74	55	—
	Brest	?	63	W	2	c	?	?	59	57	— 1	W	4	c	4	66	52	0.08
	Lorient	30.01	62	WNW	3	bc	29.97	— .03	58	54	— 1	WNW	4	bc	4	66	54	0.04
	Rochefort ...	30.03	67	NW	4	bc	30.04	— .04	66	59	+ 2	WNW	4	o	2	75	57	—
	Belfort ... ... ‡	29.97	61	W	1	b	29.92	— .09	60	54	— 1	W	1	b	*	66	56	—
	Lyons	29.95	70	N	1	o	29.95	— .10	63	60	+ 1	W	1	c	*	78	59	0.20
	Nice... ... ... ‡	29.89	73	NE	5	b	29.86		73	64		NE	1	c	0	82	63	0.04
	Perpignan ...	29.95	67	W	1	o	29.97	— .03	70	63	0	W	3	bc	*	80	62	? 3.39
	Biarritz	29.99	66	N	4	o	30.04	— .02	62	60	— 4	SSW	3	r	3	77	61	0.28
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon.	30.10	66	NNW	4	b	30.11	+ .02	64	59	— 1	N	4	b	2	73	61	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on *Tuesday, 23rd July,* 1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.

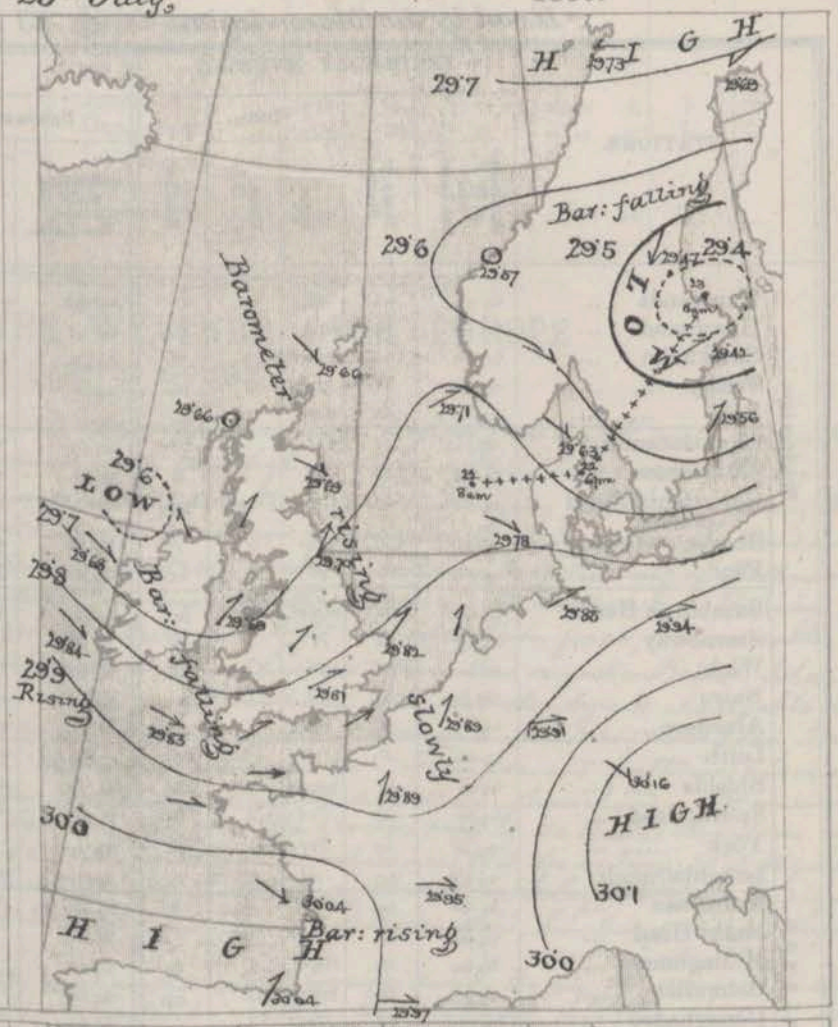
WIND - Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE – Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



TEMPERATURE, & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

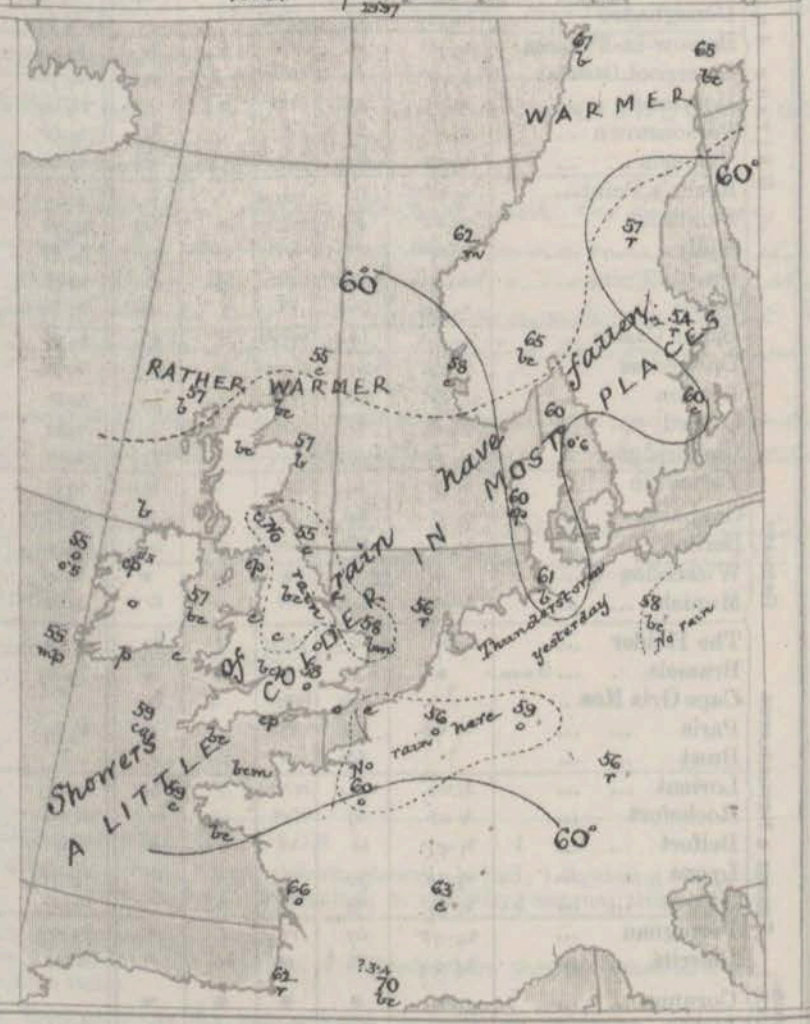
RAINFALL – A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·4	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·0	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·0	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30·1 ins. and upwards, in Portugal, and also over South Germany;
Lowest 29.4 ins. and less, in a depression lying over the southern part of the Gulf of Bothnia;
29.6 ins. and less, in a small disturbance lying off the northwest of Ireland.
Gradients slight generally. Barometer falling slightly in England, Ireland and the W. of France, but rising elsewhere.

TEMPERATURE

Highest 70° at Perpignan, 67° at Rodez, 66° at Rochefort, 65° at Haparanda, 63° at Faoder and Lyons & 62° at Christiansund & Biarritz
Lowest 54° at Stockholm, Hearn, Barrow-in-Furness and Parsonstown, and 55° at Flamborough Head, Shields, York, Malin Head, Belmullet, Valencia, Roche's Point and Cayord.
The highest maxima registered over our Islands yesterday were 68° at Aberdeen, and 67° at Dungeness.

WIND

Moderate to fresh from W. or NW. on the west coasts of our Islands and France, as well as in Denmark & Germany.
Light from S.W. or S. in the Netherlands and the East of England, variable in the North and East of Scotland.
E. by N. or NE. by N. in the North of Scandinavia; W. by N. or S.W. by W. in the South.

WEATHER

Fine in Scotland and the north of Scandinavia, but changeable and showery elsewhere.
Considerable amounts of rain have fallen at some of our western stations, & a thunderstorm has occurred at Lerwick.

SEA

Moderate to smooth.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The small depression off the northwest of Ireland will probably advance eastwards, and occasion a continuance of showery weather, with thunder at some of the English stations.

FORECASTS

For the 24 hours ending at NOON on 24th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	Light variable breezes; fair to showery.
1 SCOTLAND EAST	
2 ENGLAND N.E	S. by W. to W. by W. winds, light or moderate; changeable, some showers, thunder locally.
3 ENGLAND EAST	
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	SW. by W. and W. by W. winds, fresh; changeable, some showers, thunder locally.

DISTRICTS.	FORECASTS
6 SCOTLAND WEST	Same as No. 2 to 4.
7 ENGLAND N.W.	W. by W. to NW. by W. winds, moderate or fresh; changeable, some showers.
8 ENGLAND S.W.	
9 IRELAND NORTH	NW. by W. winds, moderate or fresh; changeable, some showers.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▽), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (△), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesmacs ...	29.53	60	57	WSW	2	o	3
Sumburgh Head	29.50	56	54	WNW	1	c	2
Stornoway ...	29.54	58	56	SW	3	c	3
Aberdeen ...	29.59	68	56	WSW	1	bc	1
Shields	29.71	63	54	SW	3	c	2
Ardrossan ...	29.68	56	54	SSW	4	c	3
Malin Head ...	29.64	56	54	WSW	4	c	4
Mullaghmore ...	29.73	55	52	WSW	5	op	4
Belmullet ...	29.75	56	53	W	2	o	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	29.82	58	54	SSW	5	cg g	5
Valencia	29.90	62	56	W	4	c	4
Scilly	29.96	61	58	SW	4	o	4
Jersey	30.01	65	56	SW	3	bc	3
Dungeness ...	29.91	65	56	WSW	6	c	5
London	29.91	65	56	WNW	3	c	*
Yarmouth ...	29.83	63	58	WSW	2	bc	2
Rochefort ...	30.08	72	64	NW	3	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure had decreased somewhat over Russia, and also over southern Europe, but increased rather decidedly over the British Islands and west of France, though it was again giving way a little in Ireland. Readings varied from between 30.12 ins. and 30.00 ins. over the Peninsula and France, and from a little above 30.00 ins. at Moscow to 29.4 ins. and less, in a depression lying between the Shetland Isles and Norway, and stretching SE^wds. over the North Sea, to 29.6 ins. and less, in a smaller one over the Baltic, and to 29.9 ins. and less, in other shallow disturbances lying over the Mediterranean. The wind was moderate to strong from between W. and NW. in our Islands, strong from SW. over the Netherlands and Germany and moderate from SE. in Norway, in Finland it was NE^ly and in the Baltic N^ly. Over southern, southeastern and eastern Europe it was lighter in force and variable in direction. The weather was fine and bright over southern and southeastern Europe, and over the North of Scandinavia, fair (but not settled) over the greater part of our Islands, cloudy and very changeable elsewhere, with rain at many of the Baltic stations, and on the eastern shores of the North Sea. The rainfall had been very considerable over the British Islands, North Sea and Germany, and thunder and lightning had occurred in several places. Temperature had given way a little in many places; it was as high as 80° in Algeria and on the shores of the Black Sea. The highest morning values were 82° at Algiers and Aumale, 80° at Constantinople and Odessa, 79° at Brindisi and Toulon, 77° at Barcelona, Trieste and Nicolaieff, 76° at Lesina and Malta, 74° at Naples, 73° at Rome and 70° at Perpignan, Nice and Florence, the lowest were 52° at Sumburgh Head, 54° at Malin Head, Yarmouth and Haparanda, 55° at Stornoway, Ardrossan and Holyhead, 56° at Belmullet, London and Archangel, and 59° at Brussels.

During the day the barometric fall in the W. continued and spread both southwards and eastwards, and showery weather again set in over the western parts of the British Islands.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

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DAILY WEATHER REPORT.

for *188*

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.67	58	E	6	r	29.71	+ .02	60	57	— 5	E	2	o	*	68	52	0.04
	Hernösand ...	29.52	57	ENE	4	o	29.65	+ .18	59	58	+ 2	NE	2	f	*	63	55	0.43
	Stockholm ...	29.57	59	WSW	2	o	29.67	+ .25	59	55	+ 5	WSW	2	o	*	61	50	0.36
	Wisby	29.69	60	SSW	6	b	29.75	+ .19	59	57	— 1	WSW	4	bc	*	68	54	—
	Bodö	29.71	64	Z	0	fb	29.75	+ .02	67	58	0	E	2	b	1	70	57	—
	Christiansund...	29.72	58	WSW	4	c	29.74	+ .17	57	53	— 5	SW	2	o	1	62	52	—
	Skudesnaes ...	29.77	57	W	2	b	29.73	+ .02	58	52	0	NNW	3	b	2	66	48	—
	Christiania Fjord (Fiorder)	29.64	63	WSW	5	b	29.62	+ .01	60	58	— 3	NNE	3	o	3	64	59	—
	Skagen (The Scaw)	29.70	57	WNW	5	b	29.66	+ .03	61	53	+ 1	W	3	bc	2	64	54	—
	Fanö	29.79	55	SW	1	b	29.73	— .05	59	57	— 1	SW	4	c	*	66	54	—
BRITISH ISLANDS.	Sumburgh Head	29.71	57	WNW	1	bc	29.70	+ .04	58	56	+ 3	SE	1	bc	1	60	48	—
	Stornoway ..	29.72	57	NE	2	c	29.58	— .08	57	56	0	S	4	b	4	61	?46	—
	Wick	29.73	60	SE	1	bc	29.65	— .04	58	55	+ 1	SE	2	b	1	65	45	—
	Nairn	29.70	63	ENE	2	bc	29.64	— .02	55	50	+ 1	Z	0	bmw	1	67	42	—
	Aberdeen... ...	29.74	56	S	2	b	29.70	+ .01	58	54	+ 1	SSE	2	bw	2	62	42	—
	Leith	29.71	59	SE	2	bc	29.69	.00	61	54	+ 2	SE	1	bm	*	62	44	—
	Shields	29.71	56	SE	2	c	29.72	+ .02	52	50	— 3	SW	1	m	2	60	45	0.13
	Spurn Head ...	29.71	59	ESE	3	bc	29.75	.00	52	52	— 6	NW	1	f	2	63	49	—
	York	29.71	61	N	1	bc	29.77	+ .03	52	50	— 3	N	1	b	*	65	43	—
	Loughborough	29.72	59	ENE	1	c	29.80	+ .03	48	48	— 9	E	1	fw	*	67	40	0.26
	Ardrossan ...	29.71	61	Z	0	b	29.66	— .02	58	55	— 1	S	2	o	1	62	48	—
	Malin Head ...	29.71	57	ENE	3	b	29.54	— .09	56	55	+ 1	SSE	4	org	2	59	55	0.04
	Mullaghmore ...	29.75	59	WNW	4	bv	29.53	— .09	55	53	— 1	SSE	6	or	4	62	51	0.23
	Belmullet ...	29.79	57	NW	2	bc	29.46	— .22	56	55	+ 1	SSW	6	r	*	?59	53	0.63
	Donaghadee ...	29.74	58	ENE	3	b	29.68	+ .01	53	51	— 3	SE	2	o	0	60	51	—
	Barrow-in-Furness	29.70	59	NW	4	bc	29.74	+ .04	54	53	0	NE	3	bc	*	60	50	0.17
	Liverpool (Bidston)	29.71	60	SW	1	bc	29.77	+ .05	56	52	— 3	SSW	1	o	2	63	50	0.08
	Holyhead ...	29.72	56	N	1	b	29.75	+ .06	55	54	— 2	SSW	2	ogw	2	62	48	0.03
	Parsonstown ...	29.77	62	NW	1	b	29.66	— .02	53	52	— 1	SE	1	r	*	64	49	0.32
	Valencia	29.90	59	WNW	3	cw	29.66	— .18	58	57	+ 3	SSW	6	rm	6	62	53	0.23
	Roche's Point...	29.83	58	NW	5	cq	29.70	— .07	57	55	+ 2	WSW	4	c	4	60	52	0.40
	Pembroke ...	29.94	58	W	6	bc	29.81	+ .05	55	55	— 1	S	3	rm	3	59	54	0.12
	Scilly	29.88	58	WNW	6	o	29.88	+ .05	59	58	0	WSW	4	o	4	62	54	0.10
	Prawle Point ...	29.82	59	W	5	bc	29.96	+ .08	59	55	+ 2	WSW	3	rg	2	62	53	0.02
	Jersey	29.90	61	WSW	6	bp	29.96	+ .07	60	57	+ 1	WSW	3	ogm	3	63	57	0.01
	Hurst Castle ...	29.79	60	W	6	cpbl	29.88	+ .07	60	60	+ 3	W	4	c	4	63	53	0.41
	Dungeness ...	29.76	60	WSW	5	c	29.82	.00	60	56	+ 1	WNW	3	bc	3	65	50	0.15
	London	29.75	62	SSW	3	c	29.83	+ .02	58	54	0	WSW	2	o	*	65	48	0.06
	Oxford	29.75	54	W	1	c	29.83	+ .03	54	52	— 1	SW	2	o	*	65	46	0.10
	Cambridge ...	29.75	59	S	1	c	29.81	.00	52	52	— 5	SW	1	o	*	65	48	0.10
	Yarmouth ...	29.74	60	S	2	bc	29.77	— .05	58	57	0	SW	1	bm	1	62	49	0.03
GERMANY.	Cuxhaven ...	29.83	59	SE	2	c	29.77	— .08	57	56	— 4	SW	3	bc	*	67	55	0.08
	Berlin														*			
	Wiesbaden ...	*	*	*	*	*									*			
	Munich														*			
FRANCE & NETHERLANDS.	The Helder ...	30.19	59	WSW	1	r	29.75	— .09	59	57	+ 3	SSW	1	c	1	64	54	0.08
	Brussels	*	*	*	*	*	29.83	— .06	57	54	+ 1	SW	5	c	*	67	53	0.16
	Cape Gris Nez...	?	60	WSW	5	c	?	?	55	53	— 3	W	4	c	4	63	54	0.43
	Paris	29.93	60	WSW	2	o	29.97	+ .08	59	?	— 1	WSW	2	o	*	69	54	0.12
	Brest	?	63	SSW	4	b	?	?	60	57	+ 1	WNW	4	o	4	64	55	—
	Lorient	29.99	62	WNW	6	bc	30.03	+ .06	60	56	+ 2	WNW	4	o	4	68	54	—
	Rochefort ...	30.08	65	WNW	5	b	30.14	+ .10	63	58	— 3	WNW	4	c	2	72	55	—
	Belfort	29.95	62	W	1	b	30.01	+ .09	57	52	— 3	WS	2	o	*	70	57	0.12
	Lyons	30.00	68	N	1	bc	30.11	+ .16	59	52	— 4	NNW	1	bc	*	73	57	—
	Nice...	29.83	76	SW	4	c	29.82	— .04	71	62	— 2	SW	4	b	0	82	64	—
	Perpignan ...	30.04	69	W	2	o	30.14	+ .14	64	59	— 6	W	2	o	*	74	59	—
	Biarritz	30.11	66	W	4	o	30.15	+ .11	63	58	+ 1	WSW	4	o	3	70	61	0.08
PENINSULA.	Corunna	*	*	*	*	*	30.22	+ .08	66	61	+ 5	E	2	bc	3	72	52	0.16
	Lisbon.	30.10	66	NNW	5	b	30.12	+ .01	64	58	0	N	5	b	2	73	61	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2*

WEATHER CHARTS

for 8 a.m. on WEDNESDAY. 24TH July, 1889.

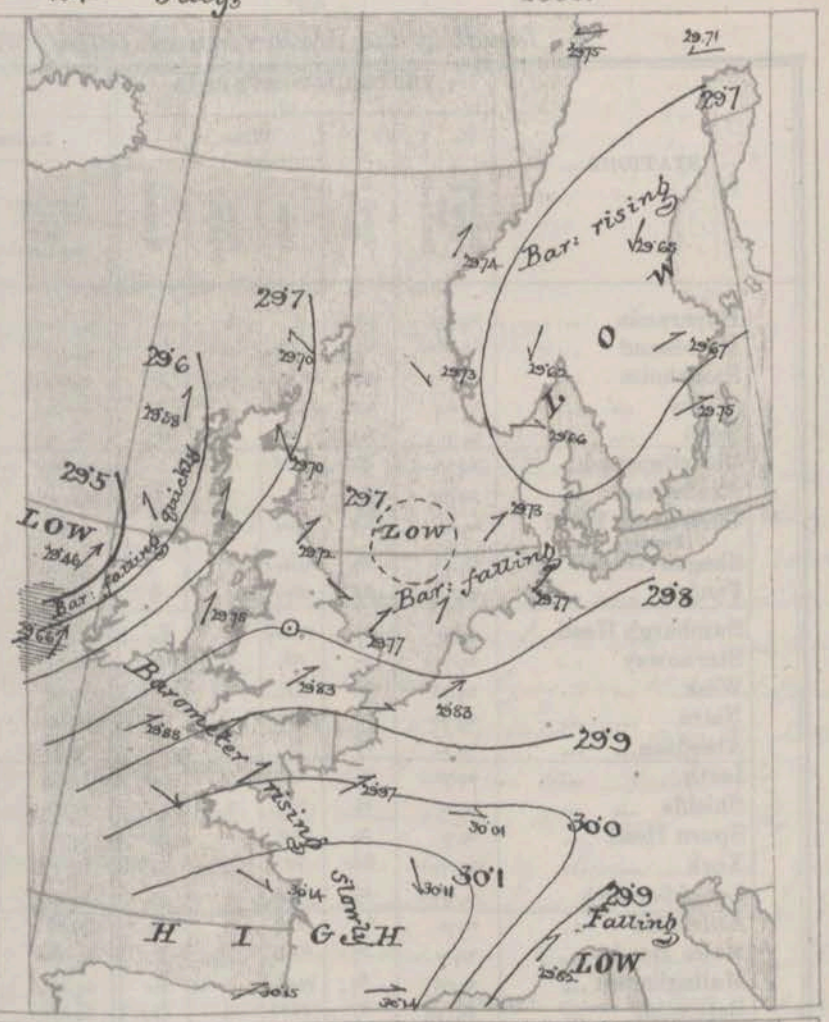
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE—Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

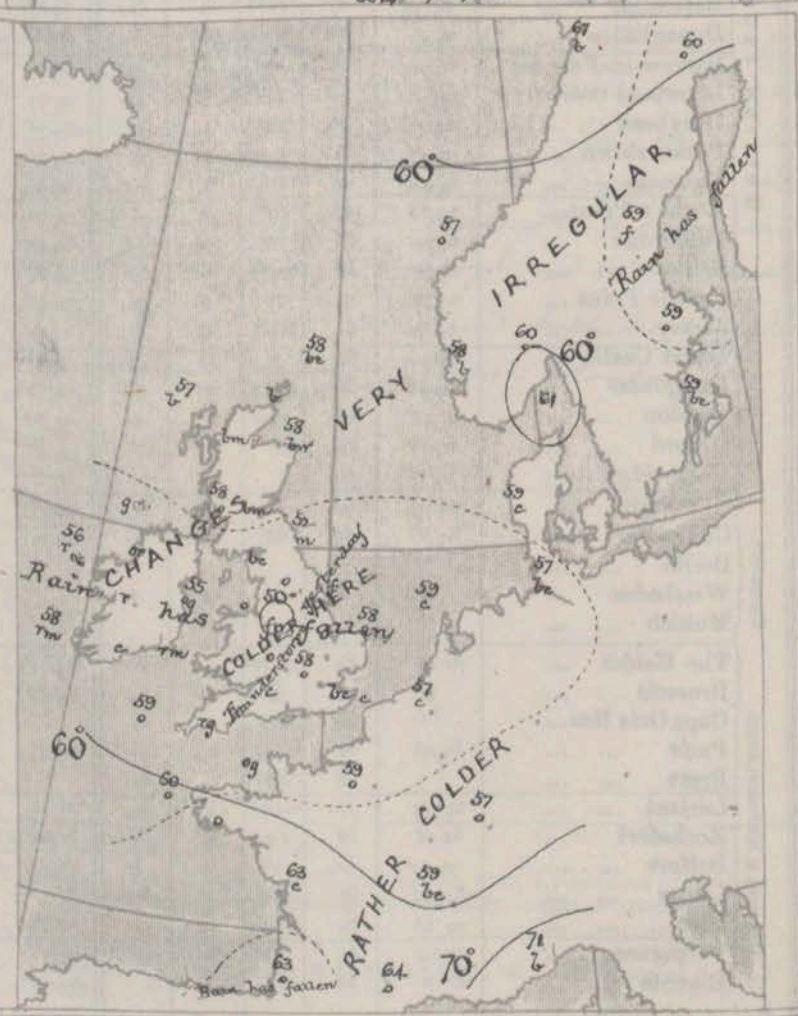
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·916
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30·1 ins. and upwards, over Spain and the southwest parts of France.
Lowest 29.5 ins. and less, in a depression lying to the west of Ireland; 29.7 ins and less, in a large area lying over Scandinavia
Gradients moderate over our west and southwest coasts, but slight elsewhere.
Barometer rising in England, France and Scandinavia, but falling elsewhere,— quickly in Ireland.

TEMPERATURE

Highest 71° at Nice, 69° at Bodö, 64° at Perpignan and Lisbon, 63° at Rochefort and Biarritz, and 61° at Shazan.
Lowest 48° at Loughborough, 52° at Shields, Spurn Head, York and Cambridge, & 53° at Donaghadee & Parsonstown
The highest temperature registered over our Islands yesterday was 67° at Nairn and Loughborough.

WIND

Strong from the S.wd. in the west of Ireland; light from the same quarter or from S.E. in Scotland.
Variable or light N.ly in the North of England, moderate from the W.wd. on our southern and the French coasts.
Light or moderate from the S.W over the Netherlands, Denmark & the south of Sweden, E.ly in the N. of Scandinavia

WEATHER

Rainy in Ireland and the southwest of England, and foggy at Spurn Head and Loughborough.
Fair or fine in most other localities.
Thunderstorms occurred yesterday in many parts of England.

SEA

Rough at Valencia, but moderate to smooth elsewhere

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The new depression which has appeared off our west coast will probably move eastwards across the more northern parts of the United Kingdom.

A considerable increase in the wind is probable on our southwest and south coasts, with a continuance of unsettled, showery weather in most districts.

FORECASTS

For the 24 hours ending at NOON on 25th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	SE.ly winds, freshening; fine to unsettled and some rain.
2 ENGLAND N.E 3 ENGLAND EAST 4 MIDLAND COUNTIES	SW.ly to S.ly winds, moderate or fresh; fair to unsettled and rainy, possibly thunder.
5 ENGLAND SOUTH	SW.ly winds, freshening considerably; fair to squally and showery, thunder locally.
6 SCOTLAND WEST 7 ENGLAND N.W.	S.ly to W.ly winds, increasing in force; squally and rainy at first, some improvement later.
8 ENGLAND S.W.	SW.ly to W.ly winds, increasing in force; squally showery.
9 IRELAND NORTH 0 IRELAND SOUTH	Same as No. 6 and 7.
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesmes ...	29.75	60	57	W	2	b	2
Sumburgh Head	29.72	58	55	WNW	1	be	1
Stornoway ...	29.71	60	57	E	2	be	2
Aberdeen ...	29.71	60	53	SSE	3	b	2
Shields	29.70	57	53	E	2	c	2
Ardrossan ...	29.70	60	55	SW	2	c	2
Malin Head ...	29.71	57	54	ENE	3	b	2
Mullaghmore ...	29.71	60	57	WNW	5	be	3
Belmullet ...	29.77	59	54	SW	3	c	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	29.69	59	56	SW	3	cp	3
Valencia	29.89	62	57	WNW	4	cq	4
Scilly	29.88	58	58	WNW	6	cq	5
Jersey	29.90	62	57	W	6	c	4
Dungeness ...	29.79	59	56	WSW	5	cp	4
London	29.79	58	55	W	3	or	*
Yarmouth ...	29.75	60	59	S	3	c	2
Rochefort ...	30.08	69	60	WNW	4	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30·1 ins. and upwards, in a large anticyclone whose eastern edge lay over Portugal and the North of Spain, as well as in a smaller system lying near Munich. The lowest readings 29.5 ins. and less, were found in a large depression which lay over the southern part of the Gulf of Bothnia, but a smaller disturbance with reading below 29.6 ins. was lying off the northwest of Ireland, while four shallow systems with readings below 29.9 ins. were reported over various parts of the Mediterranean and Adriatic. The wind was moderate to fresh from the W.wd or NW.wd on the west coasts of our Islands and France but light from the S.wd in the east of Great Britain. Over the Baltic moderate to strong SW.ly breezes were reported, and in the northern parts of Scandinavia and Russia E.ly breezes, but over southern and eastern Europe the wind was very variable. The weather was showery in many parts of our Islands and France, and rainy at some of the Swedish stations, but fair or fine in most other localities. Temperature had changed rather irregularly, and readings ranged from 80° and upwards, at several of the Mediterranean stations to 55° or less, in many parts of our Islands, as well as in central Sweden. The highest individual readings were 86° at Cagliari, 85° at Palma, 83° at Algiers, 82° at Constantinople, 81° at La Galle, 79° at Lesina and Brindisi, and 78° at Trieste, Leghorn and Oran; the lowest were 54° at Stockholm, Nairn, Barrow-in-Furness and Parsonstown, 55° at Sumburgh Head, Shields, York, Malin Head, Belmullet, Valencia, Roches Pt. and Oxford, and 56° at Mullaghmore, Donaghadee and Pembroke.

In the course of the day the small depression off the northwest of Ireland moved eastwards across the United Kingdom and occasioned showery weather at most of the Irish and English stations. Thunderstorms occurred in many parts of England.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Thursday, 25th July, 1889.

Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.67	61	ENE	2	o	29.69	-.02	63	57	+ 3	E	4	c	*	64	55	0.12
	Hernösand ...	29.67	57	E	2	r	29.64	-.01	55	54	- 4	S	2	o	*	68	55	-
	Stockholm ...	29.64	59	SSW	2	b	29.61	-.06	63	57	+ 4	Zo	o	e	*	72	55	-
	Wisby	29.72	59	SW	2	c	29.65	-.10	56	55	- 3	S	2	r	*	68	55	0.75
	Bodö	29.71	66	ENE	2	bc	29.67	-.08	66	58	- 1	E	2	o	1	72	57	-
	Christiansund...	29.75	57	N	1	b	29.56	-.18	60	57	+ 3	Zo	o	?	o	?	54	0.04
	Skudesnaes ...	29.68	55	NW	2	o	29.58	-.15	58	55	o	WNW	2	o	3	61	54	-
	Christiania Fjord (Farder)	29.58	59	SSW	5	o	29.52	-.10	60	56	o	S	5	c	3	64	57	-
	Skagen (The Scaw)	29.61	57	W	1	bc	29.58	-.08	60	54	- 1	W	3	bc	2	66	52	-
	Fanö	29.71	57	WSW	2	c	29.64	-.09	60	57	+ 1	SW	4	c	*	64	55	0.12
BRITISH ISLANDS.	Sumburgh Head	29.65	58	SE	3	bc	29.60	-.10	56	54	- 2	NE	2	c	2	62	52	-
	Stornoway ..	29.45	57	SW	5	bc	29.50	-.08	56	56	- 1	SSW	5	o	4	61	49	0.60
	Wick	29.56	58	SE	5	b	29.54	-.11	58	55	o	SE	5	bc	5	63	53	-
	Nairn	29.50	64	W	2	bc	29.46	-.18	57	55	+ 2	E	3	o	2	72	54	0.06
	Aberdeen... ...	29.60	56	SSE	4	ogqr	29.46	-.24	55	54	- 3	ENE	5	ogqr	4	61	54	0.03
	Leith	29.55	60	SW	1	r	29.35	-.34	55	54	+ 6	NW	2	orm	*	66	53	0.20
	Shields	29.62	60	S	3	o	29.36	-.36	52	50	o	WSW	2	r	2	63	51	0.12
	Spurn Head ...	29.69	60	SSW	4	o	29.42	-.33	58	55	+ 6	SW	6	c	4	66	51	0.01
	York	29.67	58	W	1	r	29.42	-.35	58	54	+ 6	W	3	bc	*	65	50	0.08
	Loughborough	29.71	58	S	3	o	29.52	-.28	56	53	+ 8	W	4	o	*	61	48	0.06
	Ardrossan ...	29.49	56	E	1	r	29.40	-.26	55	53	- 3	NW	4	o	3	60	47	0.41
	Malin Head ...	29.43	56	WSW	5	op	29.46	-.08	55	52	- 1	NW	2	b	3	59	50	0.22
	Mullaghmore ...	29.50	55	WSW	6	op	29.48	-.05	55	52	o	E	3	b	5	60	45	0.22
	Belmullet ...	29.52	57	W	3	o	29.48	+.02	55	52	- 1	E	3	b	*	60	49	0.08
	Donaghadee ...	29.50	62	WSW	2	bc	29.47	-.21	55	52	+ 2	WSW	4	b	2	62	49	0.13
	Barrow-in-Furness	29.53	57	SE	3	r	29.41	-.33	53	51	- 1	WNW	4	o	*	59	51	0.44
	Liverpool (Bidston)	29.60	57	SSE	2	o	29.48	-.29	53	50	- 3	WSW	4	c	4	59	50	0.52
	Holyhead ...	29.58	58	SW	5	mq	29.50	-.25	58	54	+ 3	W	4	bc	4	59	52	0.11
	Parsonstown ...	29.58	60	SW	2	c	29.47	-.19	51	50	- 2	SE	1	r	*	64	48	0.52
	Valencia	29.67	53	WSW	4	orm	29.56	-.10	57	56	- 1	W	6	orm	5	62	52	0.14
	Roche's Point...	29.64	63	W	4	b	29.55	-.15	56	54	- 1	W	5	o	4	65	52	0.02
	Pembroke ...	29.66	58	SW	6	bc	29.58	-.23	55	55	o	WSW	5	cqp	4	60	53	0.25
	Scilly	29.78	60	WSW	6	odqu	29.70	-.18	59	57	o	W	6	oqp	6	64	54	0.09
	Prawle Point ...	29.80	57	SW	6	b	29.67	-.23	57	54	+ 2	W	6	cvqu	5	59	52	0.23
	Jersey	29.95	62	WSW	3	op	29.77	-.19	61	58	+ 1	WSW	5	ogm	4	63	54	0.18
	Hurst Castle ...	29.84	59	WSW	6	cp	29.66	-.22	60	60	o	WSW	7	c	4	61	57	0.09
	Dungeness ...	29.84	58	WSW	5	qp	29.61	-.21	61	59	+ 1	WSW	6	cp	6	65	57	0.08
	London	29.81	60	SW	3	op	29.60	-.23	60	55	+ 2	WSW	3	o	*	65	55	0.05
	Oxford	29.71	58	SSW	4	r	29.58	-.25	57	54	+ 3	SW	3	cqp	*	60	54	0.09
	Cambridge ...	29.76	60	SW	2	c	29.54	-.27	59	55	+ 7	SW	2	o	*	64	51	0.03
	Yarmouth ...	29.78	63	SW	2	o	29.52	-.25	60	59	+ 2	SW	4	c	3	67	55	0.09
GERMANY.	Cuxhaven ...	29.78	59	W	2	c	29.74	-.03	57	56	o	S	3	bc	*	63	56	0.12
	Berlin	29.80	64	W	4	bc	29.86	+.06	60	56	- 1	W	3	bc	*	72	54	-
	Wiesbaden ...	*	*	*	*	*	29.92	+.01	60	57	+ 2	SW	1	o	*	66	55	0.08
	Munich	30.10	53	SW	3	bc	30.10	+.08	59	54	+ 1	SW	5	c	*	64	48	0.28
FRANCE & NETHERLANDS.	The Helder ...	29.80	61	WSW	1	c	29.56	-.19	59	58	o	SSW	4	r	4	63	57	0.28
	Brussels 9AM	*	*	*	*	*	29.72	-.11	58	57	+ 1	S	6	o	*	68	55	0.08
	Cape Gris Nez...	?	59	SW	5	o	?	?	58	57	+ 3	W	6	o	6	63	54	0.12
	Paris	30.01	63	SW	2	o	29.88	-.09	62	57	+ 3	SW	5	c	*	70	58	-
	Brest	?	60	W	5	o	?	?	60	57	o	W	5	o	5	66	54	0.28
	Lorient	30.03	63	W	5	o	29.87	-.16	61	60	+ 1	WSW	6	m	4	64	59	0.12
	Rochefort ...	30.16	64	W	3	c	30.07	-.07	65	61	+ 2	WSW	4	c	2	72	59	-
	Belfort																	
	Lyons	30.12	66	ENE	1	c	30.09	-.02	61	56	+ 2	SSE	1	b	*	71	58	-
	Nice...																	
PENINSULA.	Perpignan ...	30.12	74	NW	3	b	30.12	-.02	67	61	+ 3	Zo	o	b	*	78	55	-
	Biarritz	30.18	70	N	3	b	30.10	-.05	66	61	+ 3	SE	1	b	2	73	59	-
	Corunna	*	*	*	*	*												
	Lisbon	30.08	66	NNW	5	b	30.09	-.03	64	58	o	N	5	b	2	77	61	-

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on *Thursday, 25th July,* 1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch.
Changes since previous morning are stated in words.

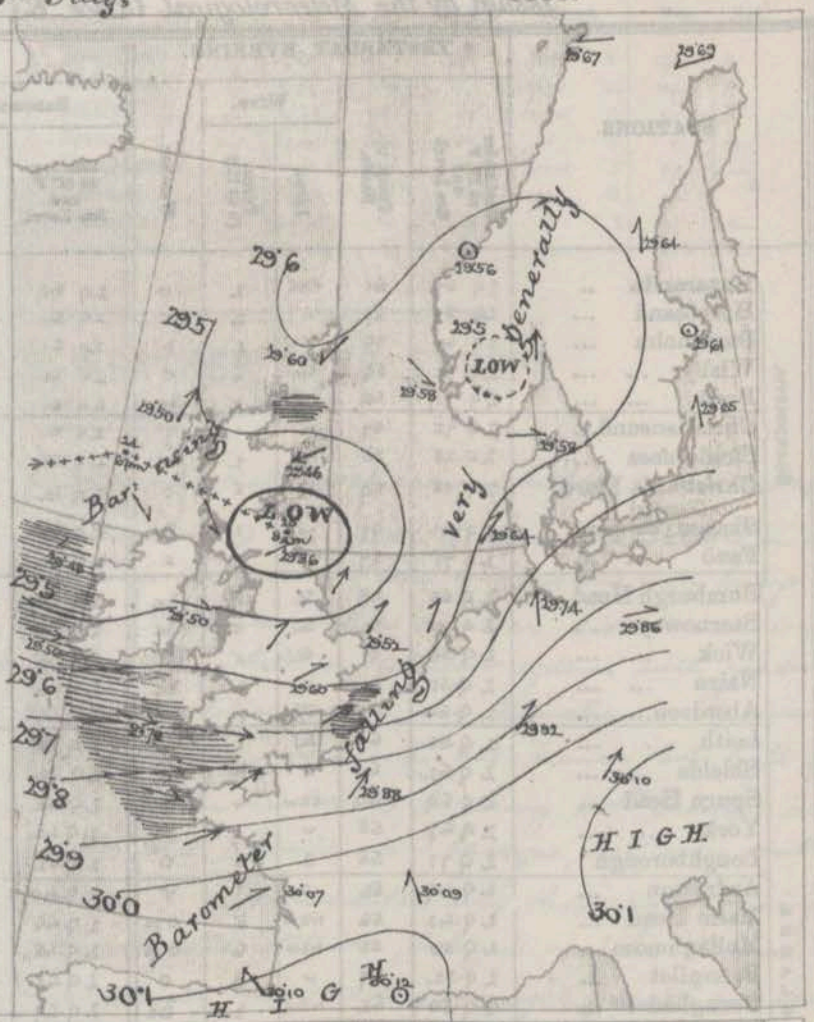
WIND - Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years. 1871—1885.

STATIONS.	MEAN READINGS. Inc.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 878
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943



TEMPERATURE, & WEATHER AT 8 A.M.
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

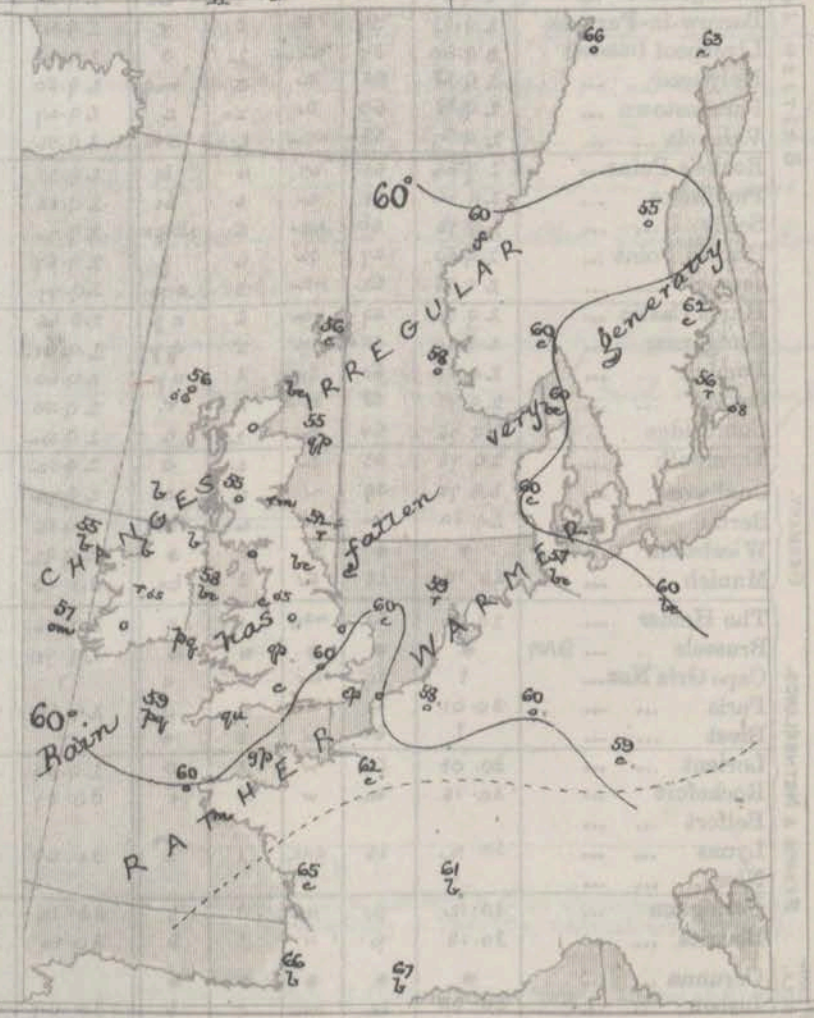
RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	54 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	56 · 8	3 · 15
Pembroke	62 · 9	55 · 0	58 · 4	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30·6 in: and upwards, over the north of Spain and the extreme south of France, as well as in a separate area lying over South Germany
Lowest, 29·4 in: and less, in a depression lying over the south east of Scotland, and the extreme north of England.
Gradient rather steep over the Channel, the Netherlands and the north of France, but moderate or slight elsewhere.
Barometer falling at all but our extreme northwestern stations — most in the east of England.

TEMPERATURE

Highest, 67° at Perpignan, 66° at Bodo and Biarritz, 65° at Rochefort, 64° at Lisbon, 63° at Haparanda, and 62° at Stockholm and Paris.
Lowest, 51° at Aurosteron, 52° at Shields, 53° at Barrow in Furness and Liverpool, and 55° at Thurso and Aberdeen, Belmullet, Donaghadee & Perth.
The maxima recorded yesterday were below 65° in most parts of England, and below 60° at some of the NW^n stations, but at Paris the thermometer rose to;

WIND

Fresh from the E^ly or SE^ly in the north of Scotland, light or moderate from the same quarter in the north of Scandinavia
Light from NW. in the south of Scotland and the extreme north of Ireland, and from E. in the northwest of Ireland.
W^ly or SW^ly elsewhere, strong in force over the southern part of our Islands and the north of France.

WEATHER

Changeable and showery generally, but fine in the north of Ireland, as well as in Denmark Germany, and the south of France.
Rain fell generally yesterday the largest amounts being 0·6 in: at Stornoway and 0·5 in: at Liverpool and Tarmouth.
Lightning was seen at Liverpool last night and thunder occurred at Wicky this morning.

SEA

Rough in the Straits of Dover as well as at Scilly and rather rough on our extreme east and south coasts generally.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

The depression over our northern districts will probably travel away shortly over the North Sea.

Secondary disturbances are, however, still passing eastwards across Ireland and England, so that a continuance of showery weather is probable, with strong W^ly winds & gales on our south coasts

FORECASTS

For the 24 hours ending at NOON on 26th JULY 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH 1 SCOTLAND EAST	E^ly winds, fresh or strong; changeable, some showers.	6 SCOTLAND WEST 7 ENGLAND N.W.	Same as No 2
2 ENGLAND N.E	W^ly and NW^ly winds, moderate; unsettled, showery, thunder locally.	8 ENGLAND S.W.	Same as No 5
3 ENGLAND EAST 4 MIDLAND COUNTIES	SW^ly to W^ly winds, moderate or fresh; changeable, showery, thunder locally.	9 IRELAND NORTH	NE^ly to NW^ly winds, moderate; changeable, showery.
		0 IRELAND SOUTH	W^ly to NW^ly winds, fresh; changeable, showery.
5 ENGLAND SOUTH	W^ly winds, strong, a gale on coast; gusty, showery, thunder locally.	WARNINGS	The SOUTH CONE was hoisted last even^g in district 5. and part of 8.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesmes ...	29·70	61	54	WNW	4	c	2
Sumburgh Head	29·68	60	57	SE	3	bc	2
Stornoway ...	29·49	61	58	E	4	o	4
Aberdeen ...	29·65	58	55	SSE	4	bc	3
Shields	29·66	60	55	SE	2	o	2
Ardrossan ...	29·58	56	55	E	1	r	1
Malin Head ...	29·43	56	56	S	5	o	3
Mullaghmore ...	29·50	59	57	WSW	5	c	4
Belmullet ...	29·52	60	57	W	3	bc	*
Holyhead ...	29·64	57	56	S	5	d g	5
Valencia	29·69	61	59	W	4	c p	5
Scilly	29·82	61	61	SW	6	o q	6
Jersey	29·97	61	58	SW	3	o	3
Dungeness ...	29·84	62	58	W	5	c	4
London	29·81	63	57	WSW	3	o p	*
Yarmouth ...	29·78	67	66	WSW	2	b	1
Rochefort ...	30·17	70	62	WNW	5	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that the distribution of pressure was of a very unsettled type. Readings were as high as 30·2 ins: to 30·0 ins: over Spain and the western and central parts of France, and that they exceeded 30·0 ins: over the southern half of Russia. From these regions they decreased to less than 29·5 ins: in a large depression off our northwestern coasts, to less than 29·7 ins: in other disturbances lying over the North Sea, Scandinavia, ~~and~~ Finland, and Poland, and to less than 29·8 ins: in another whose centre lay near Rome. Gradients were more decided than they had been of late, and the depression off our northwest coasts appeared to be moving eastwards. The wind was very variable. It was mainly from the W^rd over southern Europe, SW^ly to W^ly in our Islands and the north of France (strong on our western coasts), SW^ly, moderate over the Netherlands, Holstein, Western Germany, and the Baltic, E^ly over Northern Europe. The weather was cloudy and unsettled except in the extreme south and southeast, rain was falling at times over several of the more northern countries, and in a few localities (eg. at Carlsruhe) the amount measured was very large. Temperature was rather low over the northwestern countries, high in the southeast, variable in the south, — very high in Northern Italy. The highest individual readings were 81° at Constantinople, Brindisi, and Lyons, 80° at Rome, 79° at Palermo and Algiers, 78° at Lafalle, 76° at Pesaro and Florence, 75° at Barcelona and Naples, 74° at Oran and Sanguinaire, and 72° at Hermanstadt, Lemberg and Kiev. It was 67° at Bodö and 63° at Moscow. The lowest were 48° at Loughborough, 52° at Cambridge, York and Shields, 53° at Parsonstown and Donaghadee, 56° at Mullaghmore, Holyhead, Hawe Point, and C. Gris Nez.

During the day showery weather prevailed over almost the whole of the United Kingdom, the rainfall at some places exceeding half an inch. The wind became strong and squally at the southern stations, and blew a fresh gale in the Channel at night. Temperature was low and the appearance unsettled.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for *Friday, 26th July,* *1889.*

Issued by the Meteorological Office. 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.59	60	ENE	4	c	29.36	-.33	55	55	- 8	NE	4	r	*	64	52	0.43
	Hernösand ...	29.58	54	NE	2	r	29.42	-.22	55	53	0	SSW	8	o	*	64	50	-
	Stockholm ...	29.55	57	Zo	0	b	29.44	-.17	61	57	- 2	ESE	2	o	*	72	54	0.16
	Wisby	29.58	57	S	2	b	29.41	-.24	59	57	+ 3	SE	4	r	*	64	54	-
	Bodö	29.61	67	E	2	b	29.53	-.14	64	56	- 2	Zo	0	b	0	?	55	-
	Christiansund...	29.47	63	E	1	bc	29.44	-.12	60	57	0	Zo	0	m	0	63	54	-
	Skudesnaes ...	29.47	59	NW	2	bc	29.41	-.17	61	57	+ 3	NE	2	c	2	68	54	-
	Christiania Fjord (Fiorder)	29.50	59	SSE	3	b	29.36	-.16	59	53	- 1	NNE	5	o	2	61	57	-
	Skagen (The Scaw)	29.45	62	SSW	3	bc	29.23	-.35	58	56	- 2	SW	1	r	1	68	55	0.35
	Fanö	29.38	56	WSW	4	c	29.30	-.34	61	56	+ 1	WSW	4	bc	*	61	55	0.43
BRITISH ISLANDS.	Sumburgh Head	29.59	57	NE	2	o	29.58	-.02	54	54	- 2	N	3	r	3	60	52	0.01
	Stornoway ..	29.70	58	NE	5	o	29.80	+.30	54	53	- 2	N	5	o	4	61	50	0.09
	Wick	29.62	56	NW	5	o	29.73	+.19	53	50	- 5	N	5	o	4	62	49	-
	Nairn	29.61	59	E	2	b	29.72	+.26	56	51	- 1	NNE	4	c	2	64	54	0.01
	Aberdeen... ...	29.57	56	N	4	bcq	29.66	+.20	52	50	- 3	NW	6	oqlp	4	61	51	0.01
	Leith	29.54	56	NW	4	c	29.67	+.32	63	55	+ 8	NW	2	bc	*	63	50	0.56
	Shields	29.41	56	N	4	c	29.62	+.26	55	53	+ 3	N	4	p	4	57	51	0.57
	Spurn Head ...	29.42	58	W	4	o	29.57	+.15	56	55	- 2	NW	6	o	5	62	54	0.07
	York	29.44	55	W	3	r	29.64	+.22	55	53	- 3	WNW	3	o	*	65	50	0.13
	Loughborough	29.50	63	W	3	b	29.67	+.15	60	57	+ 4	W	3	bc	*	65	52	0.01
	Ardrossan ...	29.56	60	Zo	0	o	29.72	+.32	58	55	+ 3	WNW	5	c	3	62	49	0.09
	Malin Head ...	29.62	58	NNW	4	o	29.81	+.35	55	53	0	NNW	5	o	4	59	54	-
	Mullaghmore ...	29.68	58	NW	5	c	29.89	+.41	56	53	+ 1	NW	5	oq	4	62	54	0.01
	Belmullet ...	29.74	57	NNW	2	o	29.97	+.49	54	53	- 1	NNW	1	om	*	60	54	0.01
	Donaghadee ...	29.58	61	NE	3	b	29.79	+.32	58	55	+ 3	N	5	b	3	61	50	-
	Barrow-in-Furness	29.43	57	NE	3	bc	29.65	+.24	55	53	+ 2	NW	4	bc	*	58	50	0.04
	Liverpool (Bidston)	29.49	56	W	6	o	29.71	+.23	59	54	+ 6	NW	4	c	4	61	53	-
	Holyhead ...	29.56	58	WNW	4	cq	29.74	+.24	56	53	- 2	NNW	5	cq	4	63	55	-
	Parsonstown ...	29.66	62	NW	1	c	29.91	+.44	57	54	+ 6	NW	2	bc	*	66	49	0.21
	Valencia	29.77	58	NNW	3	bcm	29.99	+.43	59	56	+ 2	NNW	3	cm	4	63	54	0.03
	Roche's Point...	29.66	63	NNW	4	bc	29.90	+.35	59	55	+ 3	N	5	bc	4	66	54	0.01
	Pembroke ...	29.61	57	NNW	4	bc	29.79	+.21	58	56	+ 3	NNW	4	o	3	60	54	0.02
	Scilly	29.68	59	W	7	oqu	29.83	+.13	58	57	- 1	NNW	5	oq	4	61	56	0.01
	Prawle Point ...	29.66	56	W	6	o	29.76	+.09	55	55	- 2	WNW	2	oq	2	58	50	0.06
	Jersey	29.77	61	W	6	c	29.74	-.03	59	56	- 2	WNW	4	opqm	4	64	56	0.31
	Hurst Castle ...	29.61	60	WSW	8	c	29.70	+.04	59	59	- 1	N	4	c	4	63	52	0.19
	Dungeness ...	29.56	59	WSW	7	c	29.60	-.01	58	55	- 3	WNW	3	c	3	66	52	0.19
	London	29.55	61	WSW	2	cp	29.66	+.06	57	53	- 3	NW	2	o	*	63	53	0.04
	Oxford	29.55	56	NW	3	r	29.68	+.10	57	53	0	NNW	3	b	*	60	50	0.36
	Cambridge ...	29.52	58	SW	1	b	29.63	+.09	59	55	0	N	1	c	*	63	51	0.10
	Yarmouth ...	29.49	60	SSW	2	op	29.54	+.02	59	58	- 1	NW	4	c	3	64	56	0.18
GERMANY.	Cuxhaven ...	29.50	57	SW	4	r	29.43	-.31	56	55	- 1	WSW	4	c	*	63	56	0.78
	Berlin	29.64	67	WSW	4	o	29.51	-.35	62	56	+ 2	W	5	c	*	70	57	0.12
	Wiesbaden ...	*	*	*	*	*	29.64	-.28	60	56	0	SW	3	c	*	66	54	0.20
	Munich	29.87	63	SW	1	b	29.75	-.35	64	58	+ 5	SW	5	c	*	74	54	-
FRANCE & NETHERLANDS.	The Helder ...																	
	Brussels	*	*	*	*	*									*			
	Cape Gris Nez...	?	59	W	7	o	?	?	57	55	- 1	WNW	4	o	4	61	55	-
	Paris	29.74	68	SW	3	bc	29.73	-.15	57	54	- 5	SW	3	o	*	71	55	0.16
	Brest	?	60	WNW	4	c	?	?	60	58	0	NNW	2	o	4	63	54	-
	Lorient	29.87	60	W	6	o	29.79	-.08	59	57	- 2	WNW	5	c	4	63	55	-
	Rochefort ...	29.97	68	WSW	6	o	29.95	-.12	62	59	- 3	WNW	5	r	3	70	55	-
	Belfort	29.95	61	W	1	o	29.80		57	50		W	2	r	*	67	55	0.04
	Lyons	29.89	76	S	3	b	29.85	-.24	66	59	+ 5	S	1	o	*	78	?	-
	Nice...	29.97	72	SW	1	b	29.82	-.19	68	62	- 2	ENE	1	b	1	77	55	-
	Perpignan ...	29.96	78	S	2	b	29.91	-.21	69	61	+ 2	NW	3	o	*	79	64	-
	Biarritz	30.06	71	NW	3	b	29.99	-.11	66	61	0	NW	5	r	3	73	59	0.04
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.08	67	NNW	5	b	30.11	+.02	64	61	0	N	5	o	2	76	63	-

For Explanation of Columns, see p. 4.

† *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Friday, 26th July, 1889.

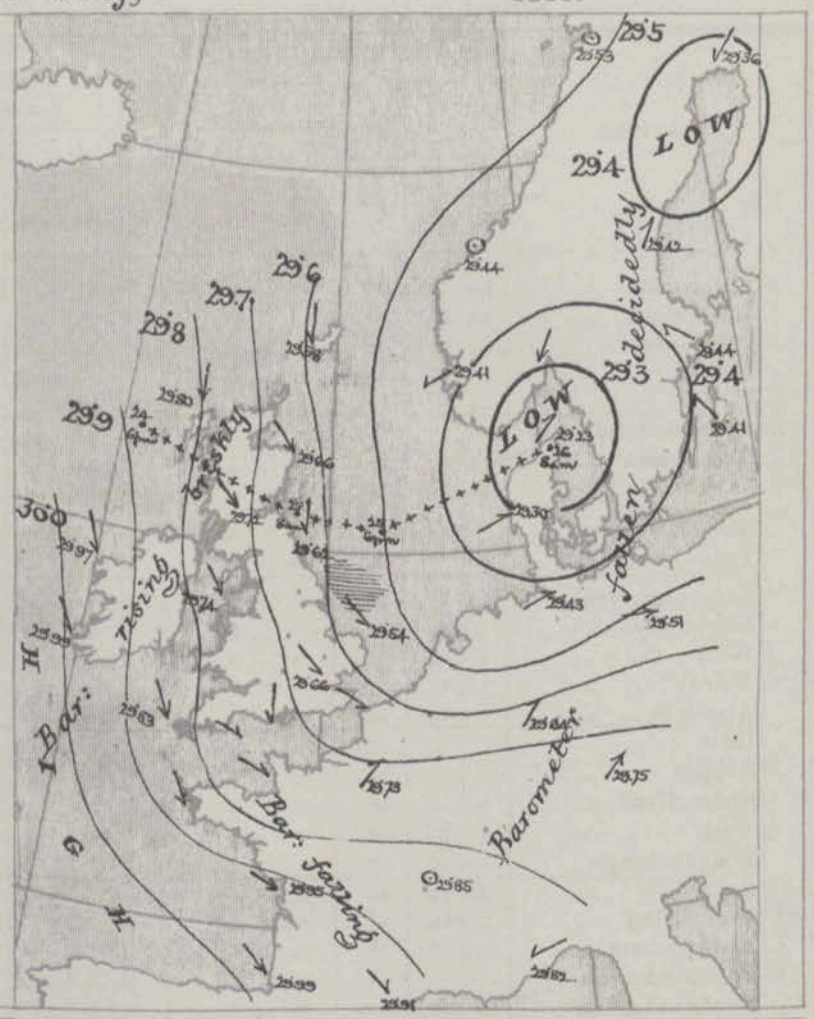
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE – Where considerable, is shown thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

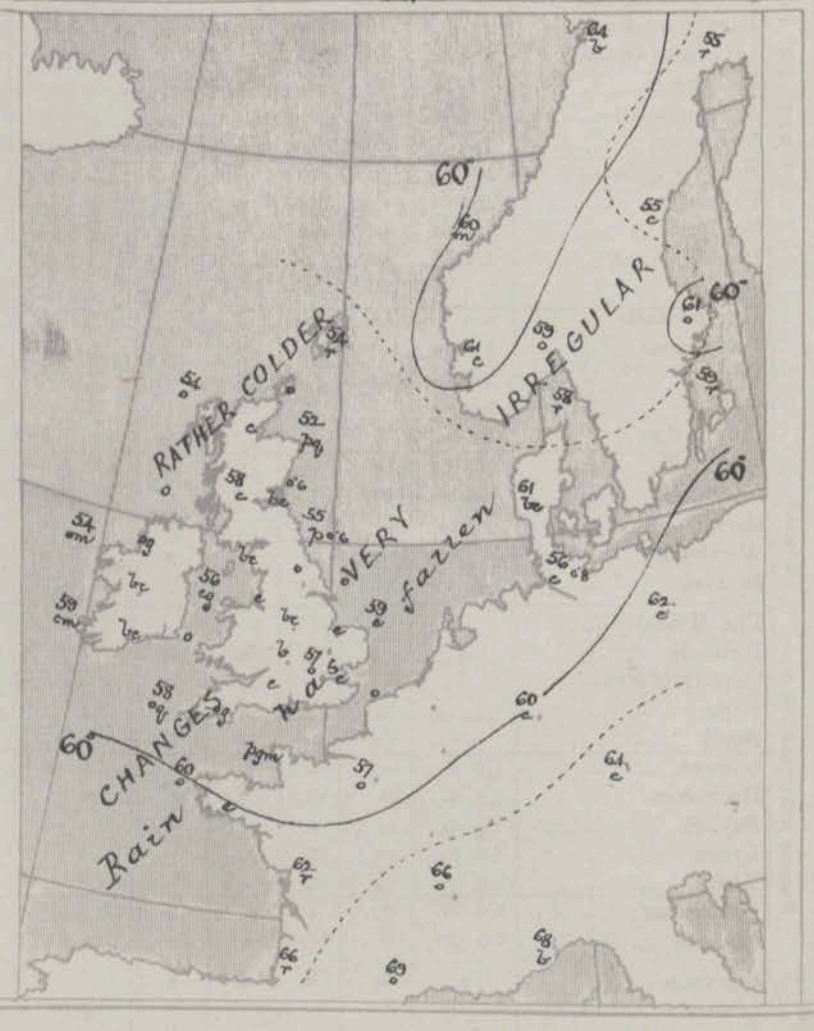
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	59·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE — Highest, 30·1 ins: and upwards, in Portugal.
Lowest, 29·3 ins: and less, in a depression lying over the northern parts of Denmark; 29·4 ins: and less, in another disturbance lying over the north of Sweden.
Gradient moderate. Barometer rising in our Islands, but falling at most of the Continental stations.

TEMPERATURE — Highest, 69° at Perpignan, 68° at Nice, 66° at Lyons and Biarritz, 64° at Bodö, Mounish, and Lisbon, and 63° at Leith.
Lowest, 52° at Aberdeen, 53° at Wick, 54° at Sumburgh Head, Stornoway and Dalwhallet, and 55° at Haparanda, Hemisand, Shields, York, Malin Hd., and Barrow in Furness.
The maxima registered yesterday were below 65° in nearly all parts of our Islands, and below 60° over the northern parts of Ireland and England.

WIND — Moderate to fresh from the N. or NW. over our Islands and the Bay of Biscay.
Moderate from SW. or W. over the Netherlands, Germany, Denmark, and the northeast of France.
E. (SE to NE) in the south of Scandinavia, calm in the west of Norway.

WEATHER — Fair over the greater part of Western Europe, but showery at some of our northern and northeastern stations, as well as at Jersey.
Rain is falling at Haparanda, Westy, Skagen, Rochefort and Biarritz.
Rain fell yesterday in most parts of the United Kingdom, the largest amounts being 0·6 in: at Leith and Shields and 0·4 in: at Oxford.

SEA — Rather rough at Spurn Hd., but moderate or slight elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There are at present no indications of the advance of any new depression of importance, but shallow secondary systems will probably move southwards across Great Britain, and showers are therefore likely in many places.

FORECASTS

For the 24 hours ending at NOON on 27th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH 1 SCOTLAND EAST	N. and NW. winds, fresh or strong; changeable, some showers.
2 ENGLAND N.E 3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	NW. and N. winds, moderate; fair generally, but local showers
6 SCOTLAND WEST 7 ENGLAND N.W.	NW. winds, moderate or fresh; fair generally, but some showers.
8 ENGLAND S.W.	NW. winds, moderate; fair generally.
9 IRELAND NORTH	N. and NW. winds, fresh; changeable, some showers.
0 IRELAND SOUTH	Same as No 8
WARNINGS	The SOUTH CONE has been lowered this morning in district 5 and part of 8.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.
The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesmes ...						
Sumburgh Head	29.59	56	56	20 0	0	2
Stornoway ...	29.68	61	59	2 4	bc	4
Aberdeen ...	29.51	60	56	ne 6	cq	5
Shields	29.37	54	52	wsw 3	r	2
Ardrossan ...	29.47	57	55	nw 3	0	2
Malin Head ...	29.55	58	55	nnw 3	b	3
Mullaghmore ...	29.61	62	57	nw 5	c	3
Belmullet ...	29.68	59	53	nnw 2	bc	*

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Holyhead ...	29.54	61	56	wnw 2	b	2
Valencia	29.64	63	60	nw 4	cpm	4
Scilly	29.70	61	59	wsw 6	cq	6
Jersey	29.77	63	58	sw 5	c	3
Dungeness ...	29.58	62	57	nsw 6	crq	5
London	29.57	61	56	w 5	op	*
Yarmouth ...	29.49	61	60	nsw 3	cp	2
Rochefort ...	30.03	69	64	nsw 6	o	3

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure had given way decidedly, both over Russia and Great Britain, while it had risen over Southern and Central Europe, and that readings varied from between 30·00 ins: and 30·14 ins: over the Mediterranean, Spain and the southern parts of France and Germany and from 29·3 ins: and more over Central Russia to 29·6 ins: and less in a depression lying over the Baltic Provinces and Western Russia, and to 29·4 ins: and less, in a complex disturbance covering the northern half of the British Isles and the North Sea. Strong W^ly^ breezes were blowing over the southern half of our Islands, the Channel, and north of France, moderate SW^ly^ breezes over North Germany, and light S^ly^ over the Baltic. In Austria the wind was fresh from NW. while over Southern Europe and the Mediterranean it was light to moderate in force and variable in direction. Temperature had fallen decidedly over Austria, the Adriatic and Italy, but continued high on the shores of the Black Sea, and on the southern and western sides of the Mediterranean. The highest individual values were 82° at Constantinople, Brindisi, and Aumale, 80° at La Calle, 79° at Lisbon, 78° at Odessa, Malta, Smyrna, and Barcelona, 77° at Kharkoff, Nicolaieff and Palermo, 75° at Cagliari, 70° at Nice and Trieste; at Moscow and Bodö the temperature was 66°. The lowest values were 51° at Parsonstown, 52° at Shields, 53° at Barrow-in-Furness, and Liverpool, 55° at Malin H., Belmullet, and Pembroke, and 56° at Loughborough. At Breslau, Memel, Prague, Cracow, and Vienna the readings were all below 60°.

Later on the depression over our northern districts moved eastwards to the North Sea, a fresh W^ly^ gale again blew in the English Channel. Rainfall was generally over Northwestern Europe and the wind began to veer northwards on our western coasts.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for Saturday, 27th July, 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sun. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.41	55	SSW	6	r	29.58	+.22	60	57	+ 5	S	2	b	*	64	54	0.39
	Hernösand ...	29.41	57	S	6	c	29.41	-.01	57	56	+ 2	S	0	r	*	72	52	0.32
	Stockholm ...	29.47	59	SE	2	o	29.41	-.03	63	58	+ 2	SSW	2	c	*	68	50	0.20
	Wisby	?	57	SSE	4	b	29.47	+.06	60	59	+ 1	S	2	o	*	66	52	0.32
	Bodö	29.29	57	NE	2	r	29.30	-.23	60	58	- 4	SSE	2	o	o	64	52	0.32
	Christiansund...	29.49	58	NNW	3	f	29.53	+.09	54	53	- 6	NW	4	r	2	63	52	0.16
	Skudesnaes ...	29.49	60	NW	6	bc	29.47	+.06	58	55	- 3	NW	6	bc	4	64	55	0.20
	Christiania Fjord (Fœrder)	29.38	60	WNW	2	o	29.38	+.02	61	56	+ 2	N	6	bc	2	63	54	0.04
	Skagen (The Scaw)	29.28	57	N	1	o	29.35	+.12	59	57	+ 1	N	2	o	1	63	55	0.04
	Fanö	29.37	58	NW	6	b	29.46	+.16	63	59	+ 2	NW	4	c	*	64	55	-
BRITISH ISLANDS.	Sumburgh Head	29.67	54	N	4	o	29.77	+.19	53	52	- 1	N	4	c	4	56	50	-
	Stornoway ..	29.91	53	N	4	o	29.98	+.18	53	52	- 1	NW	4	o	4	56	50	0.02
	Wick	29.77	54	NW	5	o	29.88	+.15	56	53	+ 3	NW	6	cu	4	56	49	0.04
	Nairn	29.83	60	N	4	o	29.92	+.20	59	52	+ 3	NW	2	c	2	64	51	-
	Aberdeen... ...	29.75	53	NW	6	ogp	29.86	+.20	56	51	+ 4	NW	6	bq	5	58	51	0.05
	Leith	29.74	62	NE	1	c	29.90	+.23	63	59	0	NW	1	b	*	68	50	-
	Shields	29.72	58	N	3	c	29.86	+.24	57	53	+ 2	N	3	o	4	59	52	-
	Spurn Head ...	29.69	57	N	6	o	29.80	+.23	56	54	0	N	6	o	5	57	53	0.06
	York	29.73	59	N	3	o	29.88	+.24	56	52	+ 1	N	3	o	*	63	52	0.01
	Loughborough	29.77	57	WNW	1	r	29.89	+.22	58	56	- 2	NW	3	o	*	65	53	0.43
	Ardrossan ...	29.78	60	WNW	5	b	29.93	+.21	59	55	+ 1	WNW	4	b	3	63	54	-
	Malin Head ...	29.92	55	NNW	5	o	30.04	+.23	53	50	- 2	NNW	4	op	3	56	52	-
	Mullaghmore ...	30.01	57	NW	6	omq	30.09	+.20	55	51	- 1	NNW	4	o	3	60	53	-
	Belmullet ...	30.14	55	NNW	3	od	30.13	+.16	54	53	0	NNW	2	o	*	58	52	0.06
	Donaghadee ...	29.88	58	NNE	5	b	30.00	+.21	56	53	- 2	NNE	5	b	3	61	50	-
	Barrow-in-Furness	?	60	NW	5	c	?	?	56	53	+ 1	NW	4	bc	*	63	53	-
	Liverpool (Bidston)	29.78	59	WNW	5	b	29.93	+.22	56	52	- 3	WNW	6	o	4	63	55	-
	Holyhead ...	29.86	57	N	4	b	29.99	+.25	54	51	- 2	NNW	5	oq	5	61	53	-
	Parsonstown ...	30.00	58	NW	8	o	30.09	+.18	55	53	- 2	NW	2	c	*	65	52	-
	Valencia	30.12	57	NNW	3	op	30.19	+.20	56	53	- 3	NNW	2	o	2	61	53	0.01
	Roche's Point...	29.99	62	N	5	bc	30.09	+.19	57	52	- 2	NNW	5	bc	4	64	54	-
	Pembroke ...	29.88	59	NW	2	bc	30.02	+.23	55	53	- 3	NNW	4	c	3	61	53	-
	Scilly	29.95	61	NNW	5	b	30.06	+.23	59	57	+ 1	NNW	5	c	4	62	57	-
	Prawle Point ...	29.83	61	WNW	4	b	29.98	+.22	60	56	+ 5	WNW	1	b	1	69	50	-
	Jersey	29.84	63	WNW	3	cqm	29.97	+.23	60	55	+ 1	NW	4	bcm	3	67	56	-
	Hurst Castle ...	29.78	61	NNW	3	c	29.93	+.23	58	57	- 1	NNW	3	c	3	70	52	-
	Dungeness ...	29.70	61	NNW	4	c	29.81	+.21	60	57	+ 2	NNW	5	c	3	68	53	0.04
	London	29.75	60	N	1	op	29.89	+.23	57	54	0	NNW	2	oq	*	68	55	0.16
	Oxford	29.79	60	NW	2	c	29.91	+.23	55	53	- 2	NW	3	op	*	65	52	0.05
	Cambridge ...	29.74	59	N	1	o	29.86	+.23	57	53	- 2	N	2	o	*	63	53	-
	Yarmouth ...	29.67	59	NW	3	o	29.75	+.21	56	55	- 3	NW	4	ogr	3	62	54	0.08
GERMANY.	Cuxhaven ...	29.43	60	WNW	4	bc	29.50	+.04	64	61	+ 8	NW	3	c	*	65	?	-
	Berlin	29.50	59	WSW	3	b	29.54	+.03	59	56	- 3	WNW	4	o	*	66	55	0.20
	Wiesbaden ...	*	*	*	*	*	29.65	+.01	59	55	- 1	W	2	o	*	68	55	0.55
	Munich	29.75	57	NW	2	o	29.72	-.03	54	52	- 10	SW	3	r	*	72	50	0.49
FRANCE & NETHERLANDS.	The Helder ...	29.58	60	WNW	2	o	29.58		59	57		NW	3	o	4	63	59	0.43
	Brussels	*	*	*	*	*	29.71		57	56		W	5	r	*	67	55	0.55
	Cape Gris Nez...	?	61	N	3	o	?	?	58	55	+ 1	N	5	c	5	66	55	-
	Paris	29.75	57	NNW	1	o	29.85	+.12	58	56	+ 1	WNW	2	o	*	64	55	0.12
	Brest	?	59	NNW	5	c	?	?	59	57	- 1	NNW	4	o	4	64	55	-
	Lorient	29.93	58	NW	4	bc	30.04	+.25	58	56	- 1	WNW	3	c	4	63	55	0.20
	Rochefort ...	29.93	65	WNW	5	b	30.04	+.09	61	59	- 1	NW	5	o	3	68	54	0.08
	Belfort	29.73	61	W	1	o	‡29.76	-.04	52	46	- 5	W	1	r	*	65	51	0.32
	Lyons	29.80	62	SSW	1	o	29.86	+.01	57	52	- 9	WNW	4	bc	*	72	52	0.08
	Nice...																	
PENINSULA.	Perpignan ...	29.84	68	NW	4	o	29.95	+.04	64	56	- 5	W	4	b	*	73	59	-
	Biarritz	30.02	65	NW	6	r	30.08	+.09	65	59	- 1	NNW	6	o	4	70	59	0.24
	Coruñna	*	*	*	*	*												
	Lisbon.	30.09	64	NNW	6	b	30.09	-.02	61	55	- 3	N	7	b	?	72	59	-

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on SATURDAY. 27TH JULY. 1889.

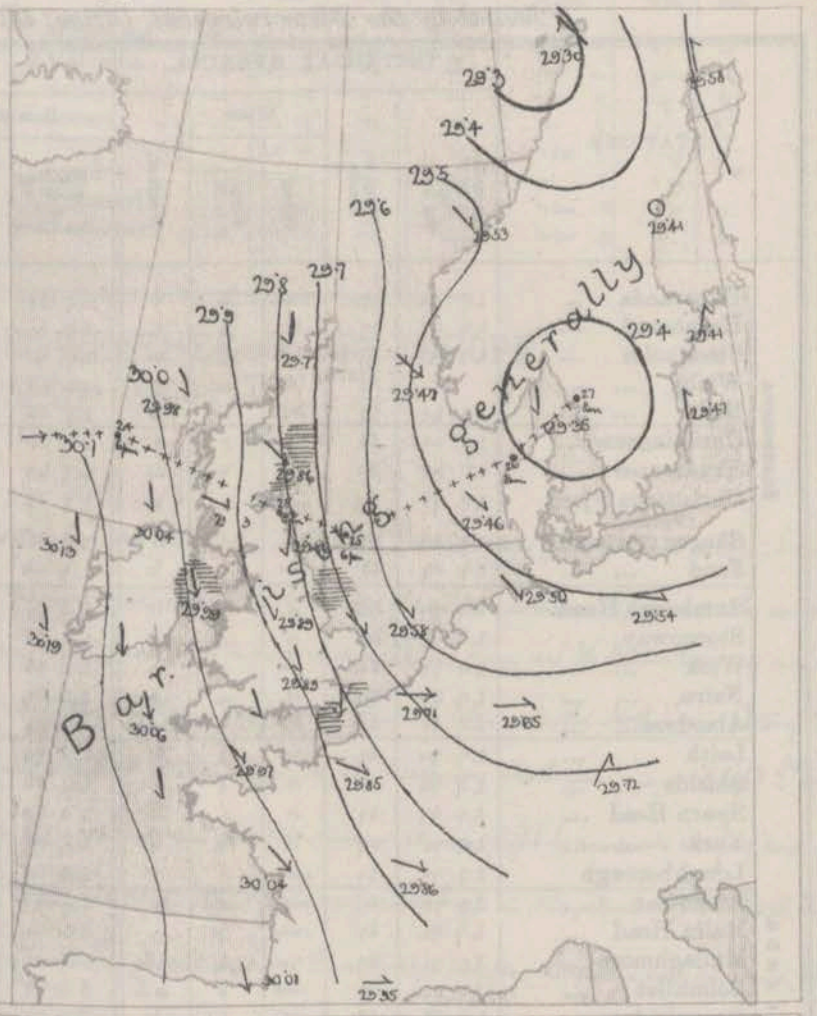
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—*Isobars are drawn for each tenth of an inch.*
Changes since previous morning are stated in words.

WIND—*Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus*—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
= dead calm.

SEA DISTURBANCE—*Where considerable, is shown thus:*
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

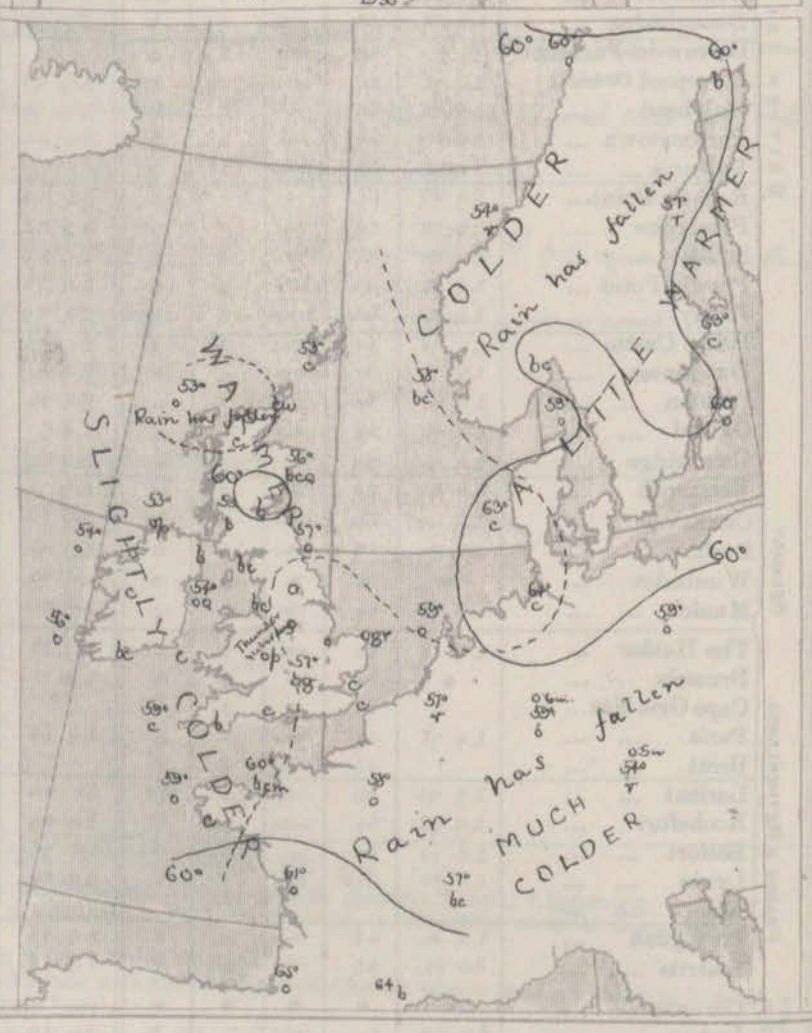
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—*Isotherms are drawn for each 10°. Changes since previous morning are stated in words.*

WEATHER *is shown by Letters of the Beaufort Scale.*

RAINFALL—*A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.*



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (*Inches.*)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·0	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

NOTE.—*The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.*

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30·0 ins. to nearly 30·2 ins. in Ireland, the southwest of England and northwest of Spain.
Lowest 29.4 ins. and less, in a large irregular depression, the central area of which covers Denmark and the south of Sweden, 29.3 ins. at Bodö.
Gradients (for N.ly winds) rather steep over the North Sea, moderate over our Islands.
Barometer rising generally, but not quickly, most in England.

TEMPERATURE

Highest 65° at Biarritz, 64° at Perpignan, 63° at Stockholm, 60° at Bodö, Haparanda and Thiby.
Lowest 53° at Scarborough, Mt. Stornoway & Malin Head, 54° at Belmullet, Christiansund and Holyhead, 55° at Pembroke and Portrush.
It has again fallen over Ireland and England, is very low for the time of year, and the fall is spreading southwards.

WIND

N.ly to NW.ly over the whole of the British Islands the North Sea, Channel and west of France.
Strong on our northeast coasts and at Liverpool, moderate to fresh elsewhere.
In Sweden it is very light from the S.ward, and in Germany moderate W.ly.
A gale from NW was felt in Caithness during the night.

WEATHER

Very dull and cloudy except in the east and south of Ireland, with some rain in a few localities—most in the E.
Rain fell generally yesterday, except in the West of our Islands, and a thunderstorm occurred at Oxford.

SEA

Rather rough on our northwest and northeast coasts, moderate generally elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Some further showers seem probable over the eastern parts of the Kingdom, but will probably be followed by drier weather and a very cold night.

FORECASTS

For the 24 hours ending at NOON on 28th JULY 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH 1 SCOTLAND EAST	N.ly and NW.ly breezes, strong; squally to fair.	6 SCOTLAND WEST 7 ENGLAND N.W. 8 ENGLAND S.W.	N.ly winds, fresh to moderate; cold, some showers.
2 ENGLAND N.E 3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	N.ly and NW.ly breezes, moderate to fresh; dull, cold, rain at times.	9 IRELAND NORTH 0 IRELAND SOUTH	N.ly breezes, falling light; fair as a whole.
		WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* ( ), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* ( ), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Skudesmaes ...	29.44	64	59	NW	4	c	2
Sumburgh Head	29.64	55	55	N	4	o	4
Stornoway ...	29.86	56	55	NE	4	c	4
Aberdeen ...	29.71	56	53	NW	6	c q p	4
Shields	29.69	57	53	N	3	o p	4
Ardrossan ...	29.75	62	57	WNW	5	b	3
Malin Head ...	29.89	55	55	NNW	6	o	4
Mullaghmore ...	30.02	58	55	NW	5	o p w	4
Belmullet ...	30.05	57	55	N	3	o m	*

	Bar.	Dry.	Wet.	Wind.		Wea.	Sea.
Holyhead ...	29.82	60	57	NW	4	bc	4
Valencia	30.08	60	56	NW	4	c q	4
Scilly	29.92	60	58	NNW	5	b c	4
Jersey	29.81	64	59	WNW	3	c	3
Dungeness ...	29.69	67	58	N	4	c	2
London	29.71	64	57	NNW	3	o	*
Yarmouth ...	29.63	60	59	NW	3	c p	2
Rochefort ...	29.88	68	62	WNW	5	bc	3

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was giving way over the Continent generally, but was increasing over the United Kingdom; readings varied from 30.0 ins. and more, to the westward of Ireland and over the western part of the Spanish Peninsula, and from about 29.7 ins. over Central Russia to 29.3 ins. and less, in a depression over Denmark, and to 29.4 ins. and less, in another over Finland and the Gulf of Bothnia. The wind had veered to NW and N over the British Islands, and the west and north of France, while it was SW^{ly} over Germany, S^{ly} over Poland and the Baltic Provinces, SW^{ly} to SE^{ly} over Finland, NE^{ly} at Haparanda and in the South of Norway, and calm at Bodö and Christiansund. The weather was unsettled except on the southern and southeastern shores of the Mediterranean, and in the southwest of Russia, the sky very cloudy, and rain was falling in several places. Temperature continued low in the northwest, and the fall noticed over Central Europe on Thursday had spread to the South of Russia and the Balkan Peninsula. The highest morning readings were 91° at Aumale, 81° at Spa and Brindisi, 79° at La Calle, 76° at Oran and Lesina, 75° at Trieste, 73° at Barcelona, Algiers, Cagliari, Pesaro, and Constantinople. At Berlin the temperature was 62°, at Paris and in London 59°. The lowest values were 52° at Aberdeen, 53° at Wick, 54° at Sumburgh Head, Stornoway and Belmullet, 55° at Shields, Prawle Point and Minster.

During the day the depression over Denmark moved northeastwards slowly, and began to fill up. The weather improved at our western stations, but continued cold, showery, and unsettled in the northeast, east, and south.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for SUNDAY 28TH JULY 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. 0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.58	59	S	2	r	29.67	+.09	57	56	−3	SSE	2	0	*	70	52	0.39
	Hernösand ...	29.52	55	X	0	c	29.67	+.26	57	57	0	SE	2	bc	*	63	55	—
	Stockholm ...	29.54	61	SE	2	0	29.62	+.21	62	59	−1	X	0	c	*	68	55	—
	Wisby	29.51	57	SE	4	c	29.61	+.14	61	57	+1	NW	4	bc	*	66	52	0.43
	Bodö	29.45	56	SE	2	0	29.59	+.29	55	53	−5	NW	2	0	0	63	54	0.32
	Christiansund...	29.65	53	WNW	3	r	29.75	+.22	54	51	0	W	3	f	3	55	?	0.12
	Skudesnaes ...	29.61	55	NW	8	0	29.77	+.30	55	51	−3	NW	7	0	3	59	52	—
	Christiania Fjord (Farder)	29.49	64	NW	2	b	29.66	+.28	60	56	−1	N	5	b	2	66	59	—
	Skagen (The Scaw)	29.55	56	NW	1	b	29.62	+.27	63	60	+4	N	1	b	1	68	55	—
	Fanö	29.60	57	WNW	4	b	29.71	+.25	58	56	−5	WNW	4	0	*	66	59	—
BRITISH ISLANDS.	Sumburgh Head	29.83	51	NNW	3	0	29.86	+.09	50	49	−3	X	0	0	1	55	48	—
	Stornoway ..	29.99	56	NW	3	bc	29.88	−.10	53	53	0	S	4	0	4	58	50	0.08
	Wick	29.91	55	NW	3	0	29.91	+.03	54	52	−2	X	0	0	1	58	50	—
	Nairn	29.94	60	NW	2	bc	29.92	0.0	55	51	−4	W	1	bc	1	68	48	—
	Aberdeen... ...	29.93	58	NNW	4	bc	29.95	+.09	54	51	−2	WNW	1	0	2	65	48	—
	Leith	29.91	64	W	1	c	29.94	+.04	55	51	−8	W	1	c	*	74	51	—
	Shields	29.90	61	N	4	b	29.97	+.11	53	51	−4	WSW	1	0	4	66	49	—
	Spurn Head ...	29.91	59	N	5	b	30.01	+.21	58	55	+2	W	1	0	3	59	53	—
	York	29.93	66	NNE	1	b	30.01	+.13	58	55	+2	SW	2	0	*	69	47	—
	Loughborough	29.95	64	NW	3	c	30.04	+.15	59	56	+1	WNW	2	c	*	69	52	0.01
	Ardrossan ...	29.97	60	WNW	4	b	29.96	+.03	54	52	−5	X	0	0	0	65	52	—
	Malin Head ...	30.06	55	NW	3	0	29.94	−.10	53	52	0	S	2	or	1	59	51	0.06
	Mullaghmore ...	30.10	56	WNW	2	0	29.97	−.12	55	54	+2	SSW	3	0	2	61	51	0.07
	Belmullet ...	30.13	57	WNW	2	0	29.98	−.15	57	57	+3	W	2	0	*	58	53	0.16
	Donaghadee ...	30.04	58	N	5	b	30.03	+.03	56	53	0	SW	2	c	1	62	53	—
	Barrow-in-Furness	29.90	63	NW	3	b	?	?	56	54	0	NW	1	0	*	64	53	—
	Liverpool (Bidston)	30.01	57	W	4	bc	30.05	+.12	58	55	+2	W	1	0	3	62	55	—
	Holyhead ...	30.05	58	NNW	1	bc	30.05	+.06	56	55	+2	W	1	owg	1	61	53	—
	Parsonstown ...	30.10	63	X	0	c	30.03	−.06	53	52	−2	X	0	r	*	65	52	0.16
	Valencia	30.18	58	NW	1	0	30.05	−.14	60	59	+4	SW	1	omd	1	61	52	0.27
	Roche's Point...	30.13	62	NNW	4	b	30.07	−.02	58	57	+1	SW	3	r	4	65	52	0.10
	Pembroke ...	30.08	58	WNW	2	bc	30.09	+.07	56	56	+1	WNW	2	obg	2	60	54	—
	Scilly	30.12	60	NW	4	b	30.12	+.06	59	58	0	W	3	0	3	61	56	0.01
	Prawle Point ...	30.06	61	NW	3	b	30.12	+.14	59	57	−1	WNW	3	c	2	68	50	—
	Jersey	30.05	63	WNW	3	b	30.15	+.18	61	58	+1	WNW	4	cm	3	65	53	—
	Hurst Castle ...	29.99	67	NW	4	bc	30.10	+.17	60	60	+2	WNW	2	cm	2	72	53	—
	Dungeness ...	29.92	63	NNW	6	bc	30.03	+.22	59	56	−1	NW	2	b	2	64	54	—
	London	29.93	64	NW	2	0	30.04	+.15	59	54	+2	NW	1	c	*	65	50	0.20
	Oxford	29.99	61	NW	3	c	30.08	+.17	58	56	+3	W	1	b	*	66	50	—
	Cambridge ...	29.94	60	NE	1	bc	30.06	+.20	57	55	0	N	1	bc	*	66	49	—
	Yarmouth ...	29.88	58	NW	4	0	30.00	+.25	58	57	+2	NW	2	b	3	59	55	0.02
GERMANY.	Cuxhaven ...	29.58	63	WNW	3	c	29.74	+.24	61	58	−3	NNW	6	0	*	66	60	—
	Berlin	29.69	64	WNW	2	b	29.70	+.16	60	59	+1	WSW	2	b	*	70	54	0.04
	Wiesbaden ...	*	*	*	*	*	29.97	+.32	60	55	+1	NW	4	c	*	66	55	2.56
	Munich	29.79	52	W	6	c	29.90	+.18	52	51	−2	W	5	r	*	59	50	0.91
FRANCE & NETHERLANDS.	The Helder ...	29.76	59	NNW	4	r	29.91	+.33	59	?	0	NNW	3	b	3	66	57	?
	Brussels	*	*	*	*	*	30.00	+.29	58	55	+1	WNW	2	0	*	62	54	0.55
	Cape Gris Nez...	?	60	N	3	b	?	?	59	56	+1	N	1	m	2	63	57	—
	Paris	29.95	61	NNW	3	c	30.10	+.25	60	57	+2	WNW	1	b	*	68	55	—
	Brest	?	58	N	4	0	?	?	59	56	0	NNW	3	0	2	63	54	—
	Lorient	30.10	59	NNW	4	0	30.18	+.14	59	55	−1	NW	2	0	2	63	55	—
	Rochefort ...																	
	Belfort	29.83	56	W	1	c	30.00	+.24	59	52	+7	W	1	0	*	62	50	0.91
	Lyons	?	?	?	3		?	?	55	52	−2	?	3	c	*	66	53	0.04
	Nice...	29.60	77	ENE	2	bc	29.75		69	59		X	0	bc	1	82	61	—
	Perpignan ...	29.99	67	W	4	b	30.10	+.15	63	54	−1	NW	5	b	*	72	59	—
	Biarritz	30.15	66	N	5	r	30.23	+.15	64	58	−1	N	4	0	?	68	63	0.04
PENINSULA.	Corunna	*	*	*	*	*	30.29	0.0	63	61	−6	NE	1	b	4	77	52	—
	Lisbon	30.04	68	NNW	5	b	30.08	−.01	69	56	+8	NNE	5	b	5	77	?	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Sunday, 28th July, 1889.

BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

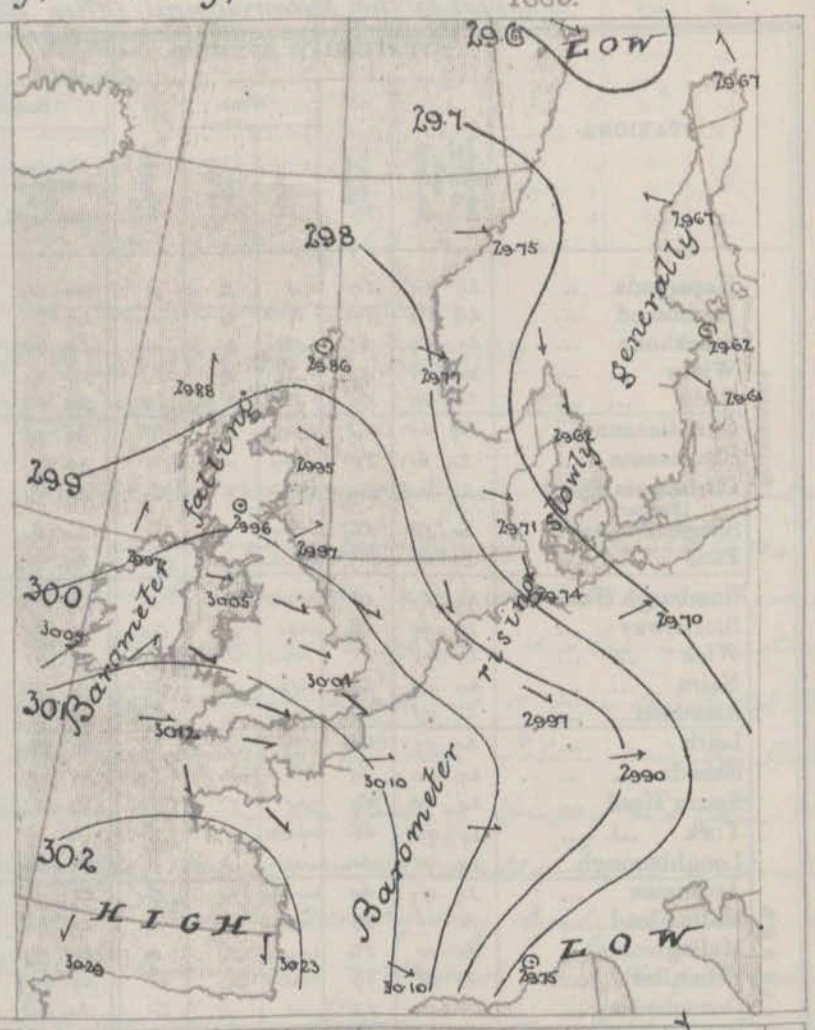
WIND - Arrows show the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
⟶ = forces above 10; ⟶ = forces 8 to 10;
⟶ = forces 5 to 7; ⟶ = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.

MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July. During the 15 Years: 1871—1885.

STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·821
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943



TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

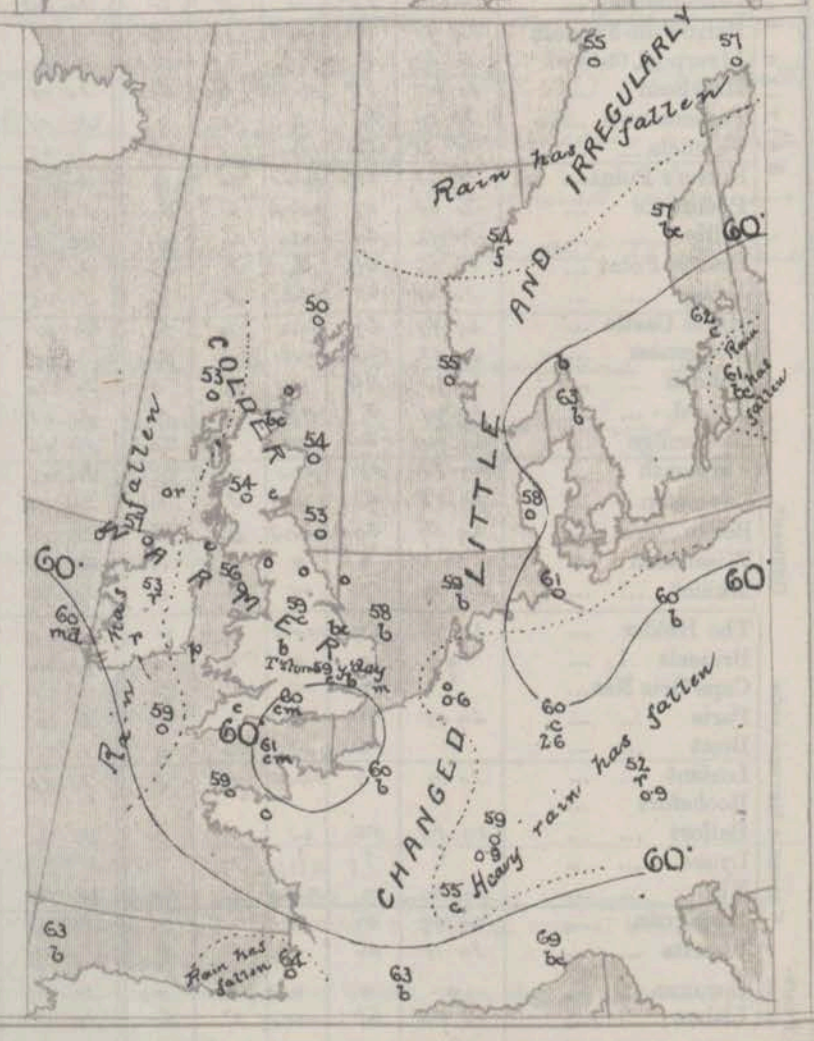
RAINFALL—A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.

MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornowsy	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·57
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·9	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.



GENERAL SITUATION AT 8 A.M.

PRESSURE	Highest 30·2 ins. and upwards, in an anticyclone lying over the Bay of Biscay and the North of Spain. Lowest 29.6 ins. and less, in a shallow depression lying over the North of Scandinavia. Gradients slight. Barometer falling rather decidedly in the extreme west of our Islands, but rising elsewhere.
TEMPERATURE	Highest 69° at Nice and Lisbon, 64° at Biarritz, 63° at Skagen, Perpignan and Corunna, and 62° at Stockholm. Lowest 50° at Sumburgh Head, 53° at Shields, Stornoway, Malin Head & Parsonstown, & 54° at Christiansund, Aberdeen & Ardrossan, Wick. The highest maxima registered over our Islands yesterday were 74° at Leith, and 72° at Hurst Castle.
WIND	Light from the SW. in Ireland, and variable from S. at Stornoway. Light from the W. over the east of Scotland, and the greater part of England. NW. at most of the Continental stations, – strong in force at Skudesnaes and Cuxhaven – but SE. in the N of Sweden.
WEATHER	Dull at most of our western and northern stations, with rain in many parts of Ireland. Fair or fine in nearly all other localities, but foggy at Christiansund, and rainy at Munich. Showers fell yesterday in some parts of England, and a thunderstorm was experienced in London in the evening.
SEA	Moderate to smooth.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

FORECASTS

For the 24 hours ending at NOON on 29TH JULY 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH	NONE ISSUED	6 SCOTLAND WEST	NONE ISSUED
1 SCOTLAND EAST		7 ENGLAND N.W.	
2 ENGLAND N.E		8 ENGLAND S.W.	
3 ENGLAND EAST		9 IRELAND NORTH	
4 MIDLAND COUNTIES		0 IRELAND SOUTH	
5 ENGLAND SOUTH		WARNINGS	NONE ISSUED

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.		Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesmacs ...	29.52	59	55	NW 8	bc	4	Holyhead ...	30.04	59	55	N 1	bc	2
Sumburgh Head	29.81	53	52	NNW 3	o	4	Valencia	30.20	59	57	SW 3	o m	2
Stornoway ...	30.00	56	53	NW 4	o	4	Scilly	30.11	60	57	NW 5	c	4
Aberdeen ...	29.91	62	55	NNW 5	bq	5	Jersey	30.05	64	59	NW 4	bc	3
Shields	29.90	65	55	NNW 4	bc	4	Dungeness ...	29.89	61	56	NNW 6	o	4
Ardrossan ...	29.98	63	58	NNW 4	b	3	London	29.94	61	56	NNW 2	o	*
Malin Head ...	30.08	57	52	NNW 2	o	3	Yarmouth ...	29.844	57	56	NW 4	o q p	3
Mullaghmore ...	30.12	59	55	NW 4	c	3	Rochefort ...	30.08	65	62	SW 5	bc	3
Belmullet ...	30.15	57	53	NW 2	o	*							

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30.2 ins. and upwards, in an anticyclone whose eastern edge extended from the Atlantic to the northwest of Spain and the extreme southwest of Ireland. The lowest readings 29.3 ins. and less, were found in a small depression lying near Bodö, but another disturbance with readings below 29.4 ins. was reported over the South of Scandinavia, while a third with readings below 29.5 ins. was lying over northern Italy. Light to fresh breezes from the NW^nd or N^nd were reported over the whole of western Europe, but in the west of Italy the wind drew into SW, while over the Adriatic and western and northern Russia it was light from the S^nd or SE^nd. Light SE^ly breezes were also prevalent over the western part of the Mediterranean. The weather varied a great deal in different localities but was upon the whole in a somewhat cloudy state, with rain in many parts of Central Europe, as well as at some of the Scandinavian and Russian stations. Temperature had changed very irregularly and readings ranged from 75° and upwards, over the Central and southern parts of the Mediterranean to 55° or less, in isolated portions of the United Kingdom. The highest individual readings were 82° at Oran and Sfax, 80° at Malta, 79° at Brindisi, 78° at Algiers, 77° at Constantinople, Lesina, Palermo and Cagliari, and 75° at Rome; the lowest were 53° at Sumburgh Head, Stornoway and Malin Head, 54° at Christiansund, Belmullet and Holyhead, 55° at Mullaghmore, Pembroke & Oxford, and 56° at Wick, Aberdeen, York, Spurn Head, Donaghadee, Valencia and Yarmouth.

In the course of the day small secondary disturbances passed southwards over Great Britain occasioning showery weather in many places, and a thunderstorm in London. Towards evening the barometer began to fall a little on our extreme west coasts and the wind there backed to the west or southwest.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

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DAILY WEATHER REPORT.

for MONDAY 29TH JULY 1889.

Issued by the Meteorological Office 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.79	59	S	2	0	29.69	+.02	59	57	+2	X	0	0	*	64	52	—
	Hernösand ...	29.78	58	X	0	b	29.82	+.15	59	54	+2	N	4	bc	*	68	52	—
	Stockholm ...	29.72	60	NNE	2	c	29.69	+.07	63	57	+1	N	6	b	*	70	57	—
	Wisby	29.63	60	NE	4	c	29.59	−.02	59	59	−2	NNE	2	0	*	66	54	0.08
	Bodö	29.78	53	NW	2	0	29.90	+.31	52	50	−3	N	2	0	1	53	50	0.04
	Christiansund...	29.88	54	N	1	0	29.98	+.23	54	51	0	NNE	1	f	1	55	54	0.04
	Skudesnaes ...	29.89	54	NW	6	0	29.95	+.18	55	51	0	NNW	7	0	3	?	50	—
	Christiania Fjord (Færder)	29.72	66	NNW	4	b	29.82	+.16	63	58	+3	N	4	b	2	68	?	—
	Skagen (The Scaw)	29.72	60	NW	1	b	29.77	+.15	63	61	0	N	1	b	1	68	57	—
	Fanö	29.86	55	NW	6	c	29.88	+.17	58	53	0	NW	6	c	*	61	55	—
BRITISH ISLANDS.	Sumburgh Head	29.90	53	NW	1	0	30.00	+.14	55	53	+5	E	1	0	1	56	49	—
	Stornoway ..	29.90	58	W	3	0	30.00	+.12	55	55	+2	W	2	r	3	59	49	0.05
	Wick	29.94	60	ENE	1	0	30.02	+.11	58	56	+4	SE	1	0	1	62	53	0.01
	Nairn	29.92	62	WSW	2	0	30.01	+.09	58	56	+3	X	0	r	1	64	53	—
	Aberdeen... ...	29.96	55	S	2	c	30.03	+.08	58	56	+4	ESE	1	bc	2	61	54	0.01
	Leith	29.96	60	W	1	0	30.03	+.09	60	56	+5	W	3	om	*	65	54	—
	Shields	29.96	60	W	3	0	30.04	+.07	59	56	+6	W	2	c	3	63	52	—
	Spurn Head ...	29.98	60	W	4	0	30.06	+.05	59	57	+1	WNW	1	0	2	64	56	—
	York	30.02	58	W	3	0	30.08	+.07	60	56	+2	W	1	bc	*	67	53	—
	Loughborough	30.03	63	W	3	r	30.10	+.06	62	58	+3	W	2	cw	*	69	56	0.01
	Ardrossan ...	29.98	57	ENE	1	0	30.05	+.09	58	56	+4	W	1	c	1	60	53	—
	Malin Head ...	29.98	56	W	3	0p	30.05	+.11	58	56	+5	S	1	0	1	65	53	0.01
	Mullaghmore ...	30.01	59	W	3	cr	30.06	+.09	60	58	+3	SSW	2	bc	2	63	54	—
	Belmullet ...	30.03	57	W	3	0m	30.06	+.08	59	58	+2	SW	3	b	*	63	54	0.03
	Donaghadee ...	30.00	64	WSW	2	c	30.09	+.06	61	59	+5	WSW	3	bc	1	64	54	0.02
	Barrow-in-Furness	29.96	57	SW	2	0	?	?	59	57	+3	S	3	om	*	59	55	—
	Liverpool (Bidston)	30.04	57	WNW	1	r	30.09	+.04	63	59	+5	WNW	1	c	2	63	56	0.03
	Holyhead ...	30.04	57	SW	3	dm	30.10	+.05	58	57	+2	WSW	2	cm	2	59	53	0.05
	Parsonstown ...	30.01	69	2	0	c	30.11	+.08	59	58	+6	2	0	0	*	71	52	—
	Valencia	30.09	61	WNW	2	om	30.12	+.07	61	60	+1	ESE	2	0	2	65	56	0.01
	Roche's Point...	30.04	62	SW	1	b	30.12	+.06	58	56	0	N	1	f	2	64	53	0.08
	Pembroke ...	30.06	58	S	4	f	30.12	+.03	56	56	0	WSW	2	fd	2	58	54	0.06
	Scilly	30.09	60	SW	4	f	30.12	0.0	59	59	0	WNW	3	f	3	64	56	0.01
	Prawle Point ...	30.13	58	W	3	0	30.13	+.01	61	59	+2	ESE	1	c	0	61	56	0.01
	Jersey	30.16	61	WNW	4	0g	30.15	0.0	60	59	−1	WSW	3	omd	3	64	58	0.06
	Hurst Castle ...	30.10	62	W	4	c	30.12	+.02	63	62	+3	WNW	2	cm	2	67	60	0.01
	Dungeness ...	30.04	64	W	3	bc	30.07	+.04	61	58	+2	N	2	bc	2	67	57	—
	London	30.04	70	WNW	1	c	30.09	+.05	62	58	+3	WNW	1	0	*	71	57	0.01
	Oxford	30.08	59	WSW	3	0	30.10	+.02	61	57	+3	X	0	bc	*	69	56	—
	Cambridge ...	30.06	69	NW	1	0	30.10	+.04	61	58	+4	N	1	0	*	70	55	—
	Yarmouth ...	30.04	61	SE	3	c	30.06	+.06	61	58	+3	NW	2	bc	2	64	55	0.03
GERMANY.	Cuxhaven ...	29.88	60	SSW	6	0	29.92	+.18	59	56	−2	NW	6	0	*	63	58	—
	Berlin	29.76	62	WNW	7	bc	29.75	+.05	57	52	−3	WNW	7	0	*	70	55	0.04
	Wiesbaden ...	*	*	*	*	*	30.08	+.11	59	57	−1	NW	1	0	*	70	55	—
	Munich	30.06	57	W	5	0	? 30.12	+.22	54	52	+2	NW	5	c	*	61	50	0.28
FRANCE & NETHERLANDS.	The Helder ...	30.02	59	NW	1	c	30.01	+.10	60	57	+1	NNE	1	c	1	61	57	—
	Brussels	*	*	*	*	*									*			
	Cape Gris Nez...	?	58	WSW	2	b	?	?	59	57	0	WNW	3	c	?	?	?	—
	Paris	30.11	68	NNW	2	c	30.16	+.06	60	57	+1	NW	1	bc	*	72	57	—
	Brest	30.22	62	WSW	3	0	?	?	60	58	+1	W	1	m	4	66	55	—
	Lorient	30.18	61	W	3	bc	30.17	−.01	60	58	+3	X	0	m	2	63	55	—
	Rochefort ...	30.23	64	NW	4	b	30.22		61	59		N	3	b	2	68	52	—
	Belfort ... ... ‡	30.08	58	W	1	0	30.13	+.13	56	49	−3	WNW	1	bc	*	63	?	0.28
	Lyons	30.12	60	WNW	1	c	30.17	?	58	55	+3	NNW	1	b	*	66	50	0.16
	Nice...	29.84	62	NNE	6	0	29.93	+.18	68	53	−1	ENE	4	b	1	79	53	0.24
	Perpignan ...	30.09	71	NW	4	b	30.13	+.03	66	58	+3	W	3	b	*	75	57	—
	Biarritz	30.22	68	N	2	b	30.16	−.07	59	56	−5	ESE	3	b	2	72	55	—
PENINSULA.	Corunna ... ... ‡	*	*	*	*	*	30.04	−.25	69	64	+6	X	0	b	2	72	54	—
	Lisbon	29.98	77	NNW	5	b	29.96	−.12	71	56	+2	NNE	4	b	2	86	68	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2*

WEATHER CHARTS

for 8 a.m. on Monday, 29th July, 1889.

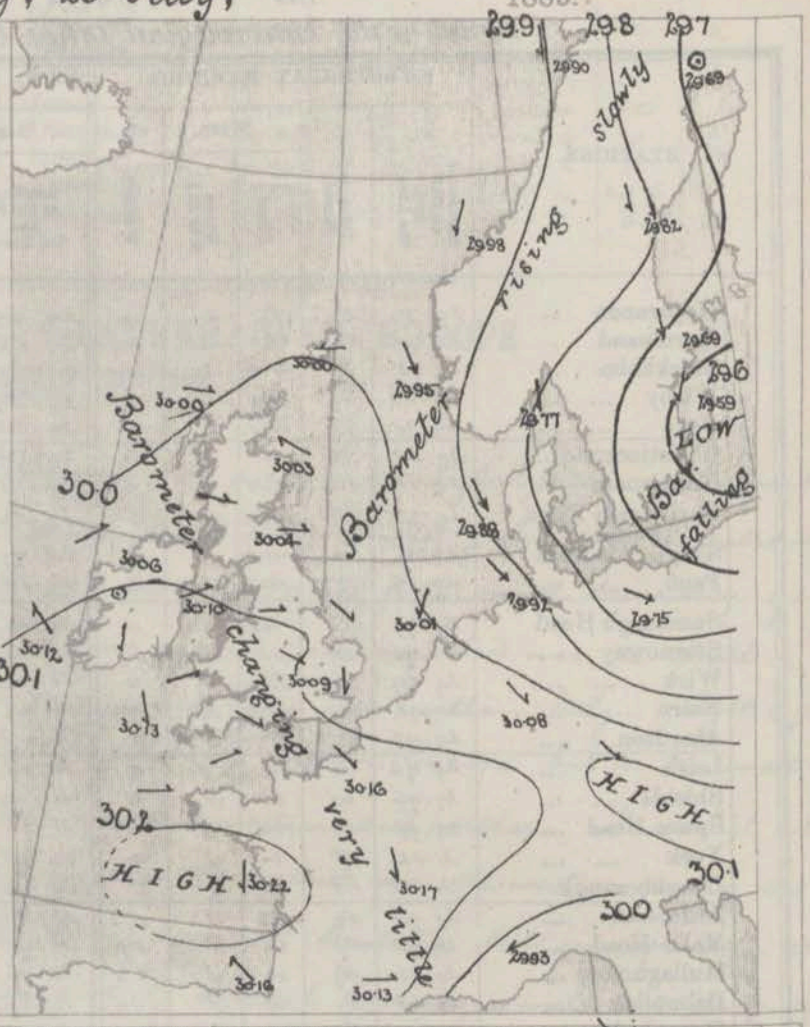
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

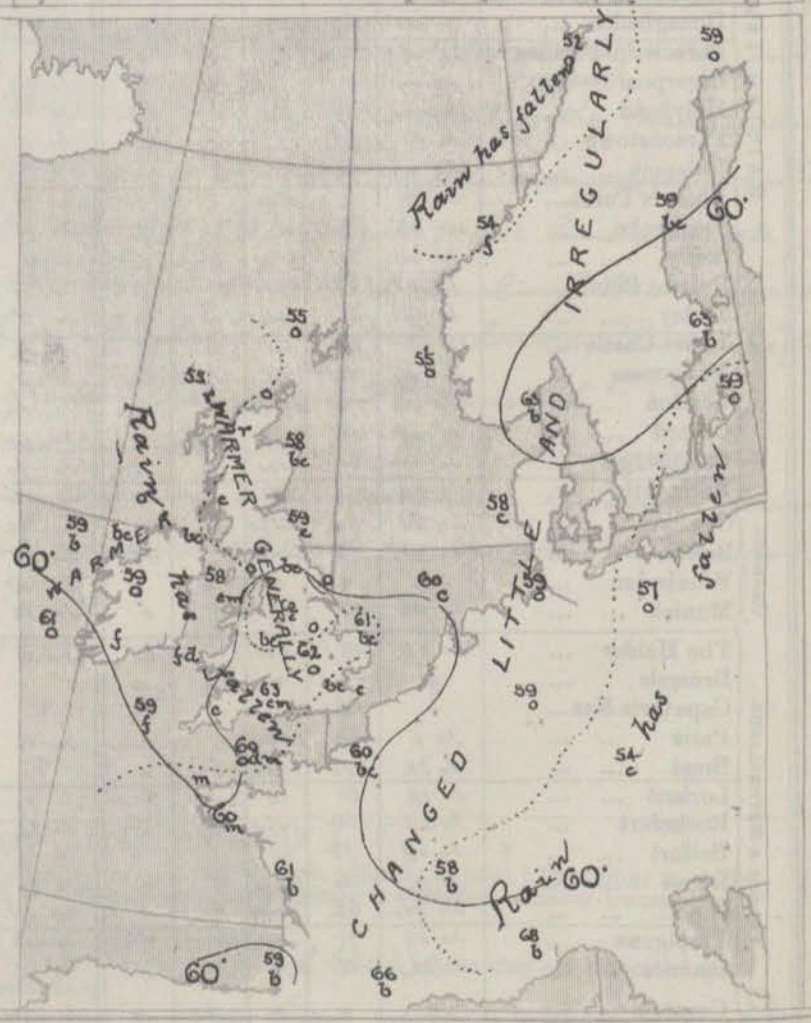
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29·794
Stornoway	29·797
Wick	29·810
Nairn	29·820
Aberdeen	29·831
Leith	29·850
Shields	29·876
York	29·910
Loughborough	29·936
Ardrossan	29·862
Donaghadee	29·881
Holyhead	29·918
Liverpool	29·913
Parsonstown	29·921
Valencia	29·939
Roche's Point	29·938
Pembroke	29·942
Scilly	29·984
Jersey	30·009
Hurst Castle	29·974
Dover	29·970
LONDON	29·967
Oxford	29·953
Cambridge	29·947
Yarmouth	29·943

TEMPERATURE, & WEATHER AT 8 A.M.,
WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL - A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (Inches.)
Sumburgh Head	57·8	48·3	53·6	52·0	2·09
Stornoway	60·2	49·5	56·0	54·0	3·02
Wick	62·2	49·2	56·1	53·8	2·25
Nairn	64·7	51·4	57·2	53·6	2·57
Aberdeen	64·4	51·1	58·0	54·4	2·74
Leith	67·1	51·7	58·6	55·3	2·84
Shields	64·4	52·9	58·6	55·4	2·63
York	68·5	52·1	59·4	56·2	2·57
Loughborough	72·1	53·0	62·0	58·2	2·34
Ardrossan	63·9	53·2	57·5	54·8	2·91
Donaghadee	63·1	51·6	57·4	55·6	2·67
Holyhead	63·9	54·7	58·2	55·9	2·32
Liverpool	66·1	54·4	59·6	55·9	2·99
Parsonstown	66·4	51·9	58·3	54·8	3·01
Valencia	64·1	53·6	58·7	56·3	3·91
Roche's Point	66·7	53·3	58·7	55·8	3·16
Pembroke	62·9	55·0	58·1	55·9	2·31
Scilly	64·5	56·3	60·1	58·0	2·29
Jersey	68·8	56·3	62·2	59·2	2·21
Hurst Castle	67·0	55·7	61·3	58·8	2·15
Dover	67·2	56·9	62·6	58·8	1·82
LONDON	73·0	54·1	62·3	58·1	2·17
Oxford	69·9	53·7	60·2	56·8	2·51
Cambridge	72·3	52·4	61·4	57·9	2·30
Yarmouth	66·8	55·2	61·2	58·1	2·68

NOTE.—The Temperature means are for the 15 years 1871-85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest, 30.10 in. to 30.22 in., over the Bay of Biscay, France and the southwest of our islands and 30.00 in. as far north as Lerwick Head.
Lowest, 29.6 in. and less, in a depression over the Baltic.
Gradient very slight in our islands, moderate to steep over Denmark and North Germany.
Barometer rising slightly in the north and extreme east, steady in the west and south.

TEMPERATURE

Highest, 71° at Lisbon, 68° at Nice, 66° at Perpignan, 63° at Horse Castle, Liverpool, the Scaw & Stockholm, 62° at Valencia & in London, 61° at Loughborough.
Lowest 52° at Bodö, 54° at Christiansund, 55° at Lerwick Head and Stornoway.
It has risen over the British Islands generally during the past 24 hours.

WIND

Very light from SW.ly and S.ly on our western coasts – from W. and NW. in the east.
Variable over France – apparently N.ly over Spain – NE.ly at Nice.
N.ly moderate to strong, over Scandinavia – NW.ly, strong to a gale, in Heligoland and Germany.

WEATHER

Cloudy or overcast in most places, with rain in some parts of Scotland.
Much fog on our southwestern coasts and at Christiansund.
Fine and bright in the northwest of Ireland, and tending to improve as a whole.

SEA

Slight or smooth on all coasts.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

Notwithstanding the gloomy appearance now prevalent in London the present distribution of pressure is favourable for finer weather in most parts of England & Ireland, less favourable for the west and north of Scotland.

FORECASTS

For the 24 hours ending at NOON on 30th JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	SE.ly and S.ly winds; cloudy, some rain.
1 SCOTLAND EAST	
2 ENGLAND N.E	
3 ENGLAND EAST	W.ly to S.ly breezes, light; gloomy and misty, then finer.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	

DISTRICTS.	FORECASTS
6 SCOTLAND WEST	S.ly and SW.ly breezes; changeable, some showers.
7 ENGLAND N.W.	
8 ENGLAND S.W.	Same as No. 5.
9 IRELAND NORTH	Varying S.ly breezes, light; fair as a whole.
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▽), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (△), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesmues ...	29.85	58	52	NW 6	o	3
Sumburgh Head						
Stornoway ...	29.89	57	57	S 4	o	4
Aberdeen ...						
Shields						
Ardrossan ...						
Malin Head ...	29.95	62	60	WNW 4	c	3
Mullaghmore ...						
Belmullet ...	30.03	61	59	NW 2	o	*

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Holyhead ...	30.04	55	55	SW 4	dr	3
Valencia						
Scilly						
Jersey	30.18	62	58	WNW 4	c	3
Dungeness ...	30.05	66	61	W 3	bc	2
London						*
Yarmouth ...						
Rochefort ...	30.25	66	60	NW 4	c	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30.2 ins. and upwards, in an anticyclone lying over the Bay of Biscay and the north of Spain, and somewhat high, 29.9 ins. and upwards, over Central Russia. The lowest readings, 29.5 ins. and less, were found in an elongated depression lying over Poland and Galicia, but another depression with readings below 29.6 ins. was reported over the North of Scandinavia, while a third with readings below 29.8 ins. was lying near Malta. The wind was NW^{ly} or N^{ly} over Norway, Denmark, France and the greater part of Central and southern Europe, and NE^{ly} in Spain. In the west of our Islands, however, it had backed to the SW, while in Russia and the north of Sweden it was light from the S or SE. The weather was fine over southern Europe and the Mediterranean as well as in the South of Scandinavia, but cloudy or overcast elsewhere, with rain in Ireland, as well as in Poland and some parts of Germany. Fog was reported at Christiansund, and a thunderstorm at Hermanstadt. Temperature had fallen a few degrees over Austria and southern Russia, as well as in the north of our Islands, but risen slightly elsewhere, readings ranged from 75° and upwards, at some of the Mediterranean stations, and 65° and upwards over Central Russia to 55° or less at many of our own western and northern stations, and also in the west of Norway. The highest individual readings were 81° at Cagliari and Brindisi, 77° at Spezia, 76° at Odessa, 75° at Barcelona, Malta Gran and La Valle, 73° at Palermo and Algiers, and 72° at Pesaro and Tunis, the lowest were 50° at Sumburgh Hd., 53° at Stornoway, Shields, Malin Head and Parsonstown, and 54° at Christiansund, Wick, Aberdeen and Ardrossan.

In the course of the day a shallow depression moved NE^{wds} past our extreme northwest coasts, while some small secondary disturbances appeared directly over our western districts. Showery weather extended eastwards to most parts of the United Kingdom, but temperature over England rose to a somewhat higher level than of late.

SUMMARY OF CHANGES IN THE WEATHER OVER THE BRITISH ISLANDS AND THEIR NEIGHBOURHOOD

FROM THE 21ST TO THE 27TH JULY 1889.

The weather of the past week has been exceedingly cool, changeable and unsettled, with thunderstorms in many parts of England.

Barometrical pressure has been usually highest over France and Spain, and lowest to the northwestward or north^{wd} of our Islands, and the prevailing winds have been therefore W^{ly} (SW to NW). In the course of the week several depressions have appeared in the neighbourhood of our Islands.

The first a complex system, having at least two minima, passed northeastwards across the northern parts of the Kingdom on the 21ST, and occasioned strong squally SW winds on our southern coasts, with heavy showers in most districts, & thunderstorms in many parts of England.

The second, a small and somewhat shallow depression appeared off the NW of Ireland on the morning of the 23RD, and subsequently travelled E^{ward} to the North Sea, where it gradually dispersed. Its passage was accompanied by considerable amounts of rain at several of our W^{rn} stations, & a renewal of thunderyweather over England.

The third a well marked and deeper disturbance advanced to our extreme northwest coasts on the 24TH. During the remainder of the week its centre travelled first eastwards across the N. of England to the North Sea, and afterwards northeastwards to the south of Sweden, where it apparently filled up. During its passage the wind increased to a moderate or fresh gale from the SW^{wd} on the Channel coasts, and to a strong breeze from the NE^{wd} in the north and east of Scotland, while thunder again occurred at some of the English stations. In the rear of the depression several small shallow disturbances passed eastwards across our Islands, and showery weather therefore continued to prevail. A thunderstorm was experienced in London on the evening of the 27TH. At the close of the week the barometer was rising generally, with NW^{ly} or N^{ly} breezes, but no marked improvement was shown in the weather.

Temperature has been continuously low for the time of year, the maximum readings of the thermometer being usually below 70° in all parts of the Country, and sometimes below 60° in some of the western and northern districts.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for TUESDAY 30TH JULY. 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.75	60	N	2	bc	29.74	+.05	64	55	+5	N	4	bc	*	73	54	—
	Hernösand ...	29.78	62	N	2	c	29.80	−.02	63	59	+4	N	6	b	*	72	50	—
	Stockholm ...	29.71	60	NNW	4	bc	29.65	−.04	62	55	−1	NNW	4	o	*	72	59	—
	Wisby	29.65	58	SE	6	r	29.59	0.0	59	54	−2	N	6	o	*	61	52	0.71
	Bodö	30.00	53	WSW	1	c	29.99	+.09	49	47	−3	WSW	4	r	2	59	48	0.04
	Christiansund...	30.06	55	NE	4	o	30.11	+.13	52	50	−2	NNE	3	o	2	55	48	—
	Skudesnæs ...	29.99	53	NW	8	b	30.05	+.10	54	50	−1	NW	6	o	3	59	50	—
	Christiania Fjord (Farda.)	29.84	67	WSW	2	b	29.91	+.09	59	52	−4	N	5	b	2	68	57	—
	Skagen (The Scaw)	29.86	62	N	1	b	29.88	+.11	63	59	0	NNE	3	b	2	70	59	—
	Fanö	29.96	56	NW	6	o	29.96	+.08	58	54	0	NW	6	c	*	64	55	—
BRITISH ISLANDS.	Bumburgh Head	30.06	59	X	0	o	30.11	+.11	59	55	+2	X	0	o	0	58	53	—
	Stornoway ..	30.05	60	SW	4	c	30.07	+.07	57	56	+2	SW	4	o	4	61	53	—
	Wick	30.09	60	SE	1	o	30.13	+.11	59	56	+1	SE	2	c	1	61	54	—
	Nairn	30.04	63	X	0	b	30.10	+.09	57	55	−1	X	0	b	0	70	50	—
	Aberdeen... ...	30.09	58	ENE	1	o	30.15	+.12	64	58	+6	ENE	1	b	1	66	55	—
	Leith	30.06	64	W	2	bc	30.13	+.10	65	60	+5	NW	1	bm	*	73	54	—
	Shields	30.07	60	ESE	2	o	30.13	+.09	65	59	+6	W	1	c	2	65	55	—
	Spurn Head ...	30.09	60	ESE	2	b	30.13	+.07	61	58	+2	ESE	2	b	3	63	57	—
	York	30.14	69	W	1	o	30.15	+.07	62	59	+2	N	1	b	*	73	51	—
	Loughborough	30.09	72	ENE	1	bc	30.16	+.06	62	59	0	X	0	cmw	*	76	54	—
	Ardrossan ...	30.09	61	SSW	2	c	30.12	+.07	58	55	0	X	0	c	0	63	55	—
	Malin Head ...	30.09	59	ESE	3	o	30.07	+.02	62	59	+4	SE	2	cm	1	63	57	—
	Mullaghmore ...	30.10	64	X	0	ev	30.05	−.01	65	61	+5	E	3	c	2	67	56	—
	Belmullet ...	30.10	61	SW	3	od	29.98	−.08	63	59	+4	SE	2	o	*	65	57	0.03
	Donaghadee ...	30.11	60	SSW	2	bc	30.14	+.05	57	56	−4	SSW	2	bc	1	63	57	—
	Barrow-in-Furness	?	62	NW	2	b	?	?	55	55	−4	NE	1	f	*	64	53	—
	Liverpool (Bidston)	30.13	63	NW	1	f	30.14	+.05	60	56	−3	SE	1	c	2	67	49	—
	Holyhead ...	30.14	58	X	0	b	30.13	+.03	59	57	+1	X	0	bw	0	65	57	—
	Parsonstown ...	30.10	73	X	0	b	30.06	−.05	59	52	0	X	0	bc	*	74	54	—
	Valencia	30.10	64	SSE	2	o	29.95	−.17	61	59	0	ESE	5	o	5	67	58	—
	Roche's Point...	30.13	60	SE	2	bc	30.06	−.07	58	56	0	SE	4	om	4	62	56	0.01
	Pembroke ...	30.14	56	WSW	2	f	30.10	−.02	58	58	+2	ESE	3	f	2	60	50	—
	Scilly	30.13	59	X	0	f	30.05	−.07	58	58	−1	SE	5	f	5	63	56	.02
	Prawle Point ...	30.16	60	WSW	2	b	30.15	+.02	56	56	−5	SE	2	f	1	64	54	—
	Jersey	30.16	65	NW	3	bc	30.14	−.01	67	62	+7	E	2	bm	2	67	58	0.01
	Hurst Castle ...	30.15	64	WSW	2	b	30.18	+.06	63	62	0	WSW	1	bw	0	71	55	—
	Dungeness ...	30.11	62	W	3	c	30.14	+.07	60	60	−1	WSW	1	m	1	66	59	—
	London	30.12	69	WNW	1	o	30.15	+.06	64	61	+2	W	1	bm	*	73	57	—
	Oxford	30.13	65	NNW	1	b	30.16	+.06	63	60	+2	X	0	bwm	*	75	54	—
	Cambridge ...	30.11	70	N	1	o	30.15	+.05	65	62	+4	E	1	b	*	72	53	—
	Yarmouth ...	30.12	63	N	1	b	30.15	+.09	60	58	−1	E	2	bc	2	64	58	—
GERMANY.	Cuxhaven ...	29.98	60	NW	6	o	30.01	+.09	59	56	0	NW	6	o	*	61	59	—
	Berlin	29.84	?	WNW	6	c	29.95	+.20	57	53	0	WNW	5	o	*	64	54	0.08
	Wiesbaden ...	*	*	*	*	*	30.15	+.07	61	59	+2	NW	1	o	*	70	54	?
	Munich	30.15	54	SW	2	c	30.19	+.07	59	54	+3	W	3	o	*	63	52	0.12
FRANCE & NETHERLANDS.	The Helder ...	30.10	61	NW	1	c	30.13	+.12	60	55	0	N	1	c	2	64	59	—
	Brussels	*	*	*	*	*	30.17		61	58		WNW	2	bc	*	66	54	—
	Cape Gris Nez...	?	64	SW	1	b	?		61	60	+2	SW	2	c	1	66	57	—
	Paris	30.16	66	NNW	2	bc	30.19	+.03	61	59	+1	N	1	b	*	73	56	—
	Brest	?	65	ESE	1	o	?	?	62	60	+2	E	4	b	4	65	55	—
	Lorient	30.15	67	WSW	1	b	30.08	−.09	59	59	−1	E	3	b	2	72	59	—
	Rochefort ...	30.17	67	NW	3	b	30.12	−.10	62	60	+1	E	4	b	3	73	54	—
	Belfort														*			
	Lyons	30.12	68	NNW	3	b	30.16	−.01	61	59	+3	NNE	1	b	*	72	56	—
	Nice...	29.99	72	NW	4	b	30.04	+.11	70	59	+2	NE	3	b	0	77	59	—
	Perpignan ...	30.06	77	NW	3	b	30.12	−.01	66	59	0	X	0	b	*	81	55	—
	Biarritz	30.06	73	NE	3	b	29.99	−.17	66	61	+7	E	4	b	1	75	?	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon.	29.91	78	NW	4	b	29.91	−.05	70	60	−1	NNE	2	b	2	91	64	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on Tuesday, 30th July, 1889.

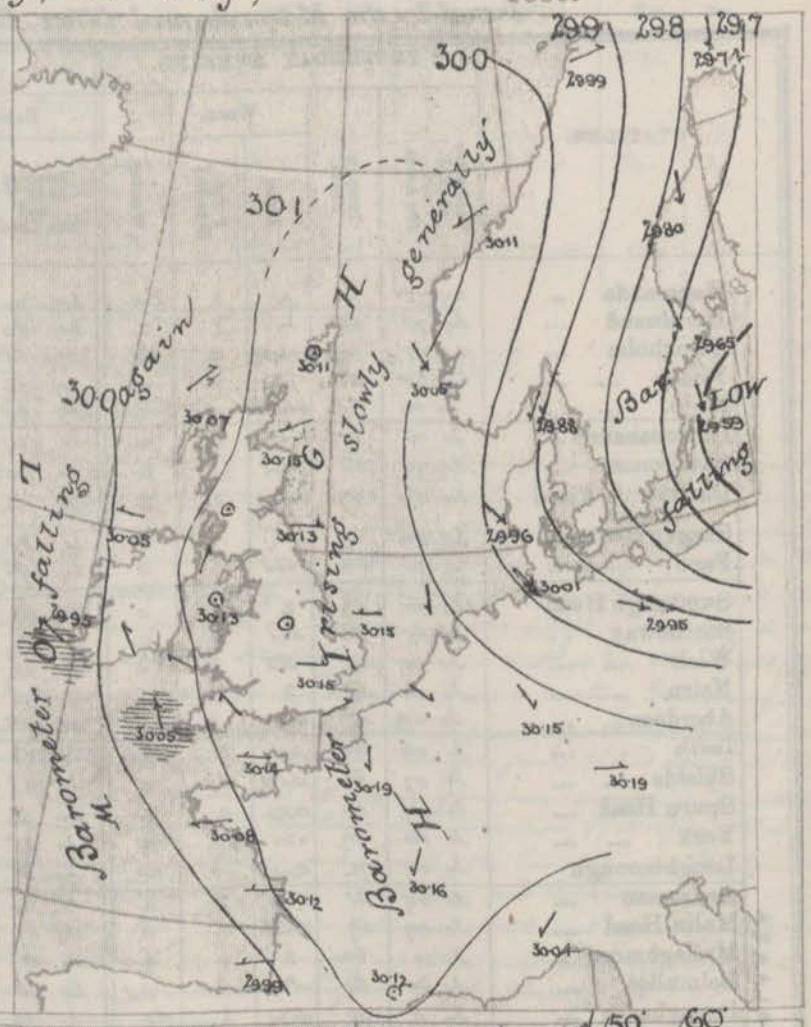
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE - Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

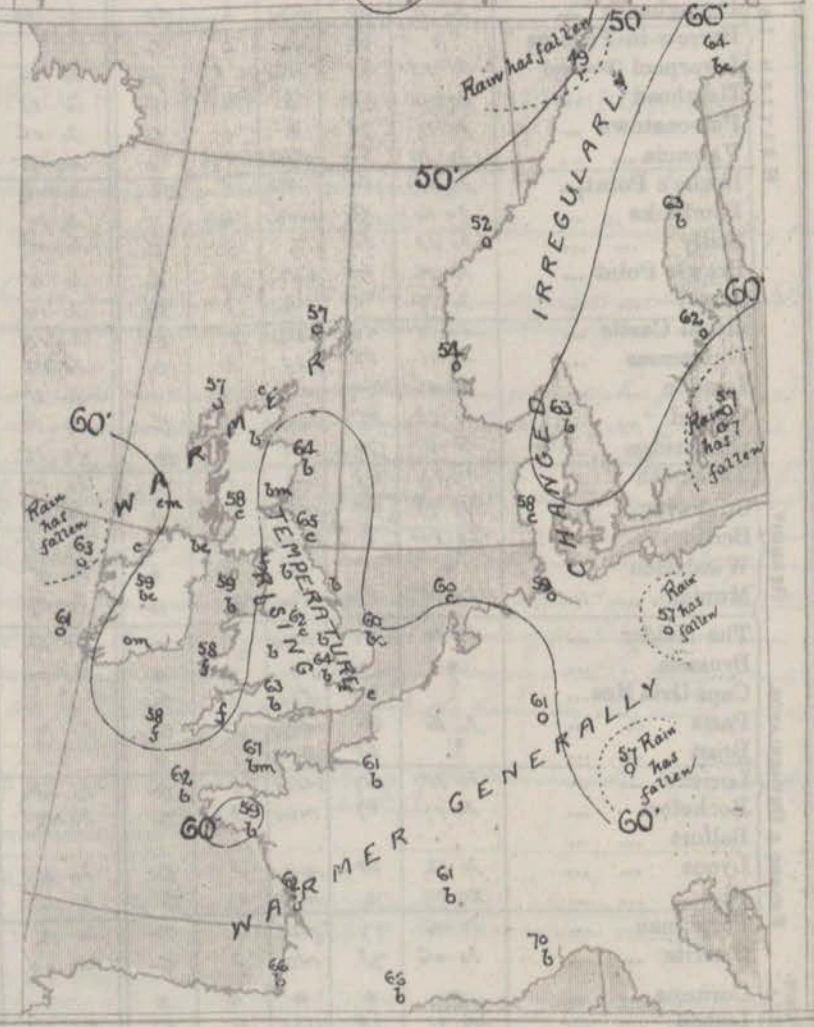
STATIONS.	MEAN READINGS. ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 919
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shown by Letters of the Beaufort Scale.

RAINFALL—A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	at 8 a.m. Wet.	RAINFALL. (Inches.)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 53
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 0	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 2	2 · 31
Scilly	61 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 9	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 3	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30·1 ins. and more, over France, England, Scotland and the western half of the North Sea.
Lowest 29·7 ins. and less, in a depression over the Baltic – 30·0 ins. and less, off the west of Ireland and over Spain.
Gradients very slight over Gt Britain and France, moderate, and increasing in the west.
Barometer falling briskly in the southwest, rising slightly in the northeast, steady in the southeast.

TEMPERATURE

Highest 70° at Lisbon and Nice, 67° at Jersey, 60° to 65° in many parts of our Islands, & 62° to 66° over the Swedish coast.
Lowest 49° at Bodö, 52° at Christiansund, 57° at Sumburgh Head, Stornoway, Donaghadee, Berlin & Munich.
It is now rising rather quickly at the English stations.

WIND

N. ⅞ and NW. ⅞ strong, at the Baltic stations, and on the eastern shores of the North Sea.
SE. ⅞, moderate to fresh and increasing, on our west and southwest coasts.
Moderate E. ⅞ over the Bay of Biscay – Calm or very light and variable over England and France.

WEATHER

Dull and unsettled to the Eastward of the North Sea, and in the west and north of Ireland.
Foggy off our southwest coast. Fine, but hazy locally over Great Britain and France.
Rain has fallen on the Baltic Coasts – Slight drizzling fog at our southwestern stations

SEA

Rather rough and rising at our southwestern stations, moderate in the Mersey, slight or smooth elsewhere

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is evidently a fresh series of depressions approaching our western coasts which are likely to cause wet and unsettled weather in those regions. These conditions may perhaps reach the remainder of our Islands later.

FORECASTS

For the 24 hours ending at NOON on 31st JULY 1889.

DISTRICTS.	FORECASTS.
0 SCOTLAND NORTH	Variable and SE. ⅞ breezes, light, fine, warm.
1 SCOTLAND EAST	
2 ENGLAND N.E	
3 ENGLAND EAST	SE. ⅞ breezes, light; fine, very warm, perhaps less fair tomorrow.
4 MIDLAND COUNTIES	
5 ENGLAND SOUTH	
6 SCOTLAND WEST	SE. ⅞ and S. ⅞ breezes, light to moderate; fair to unsettled.
7 ENGLAND N.W.	
8 ENGLAND S.W.	SE. ⅞ winds, freshening; becoming unsettled and rainy, thunder locally.
9 IRELAND NORTH	
0 IRELAND SOUTH	
WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* ( ), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* ( ), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesmues ...	29.95	57	52	NNW 8	b	3
Sumburgh Head	30.05	56	55	SSE 1	o	1
Stornoway ...	30.02	61	60	S 4	bc	4
Aberdeen ...	30.07	61	58	ESE 1	o	2
Shields	30.06	62	58	ESE 3	c	3
Ardrossan ...	30.10	61	59	SSW 2	c	1
Malin Head ...	30.10	60	58	WNW 1	o	1
Mullaghmore ...	30.09	63	61	W 2	cv	1
Belmullet ...	30.10	64	62	SW 2	o	*

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Holyhead ...	30.15	60	58	NW 2	bm	2
Valencia	30.13	66	63	SSE 2	bc	2
Scilly	30.14	62	61	SSE 1	f	3
Jersey	30.18	64	62	SW 3	o	3
Dungeness ...	30.11	62	60	W 3	c	2
London	30.12	70	61	WNW 2	c	*
Yarmouth ...	30.11	63	60	NNW 3	c	2
Rochefort ...	30.21	72	63	NW 3	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest, 30.2 ins. and upwards, in an anticyclone lying over France, and lowest, 29.5 ins. and less, in a depression lying over eastern Germany and the southern part of the Baltic Provinces. Another depression with readings below 29.6 ins. was, however, lying between Lemberg and Kiev. The wind was light from the SW and S. on the west coasts of our Islands, and from the west or northwest in the east and south of Great Britain. In Scandinavia, however, moderate to strong N. breezes were reported, in Denmark and north Germany strong NW. breezes, and in Austria & central Germany moderate or fresh W. breezes, while over central and northern Russia the wind was chiefly SE. Over Spain E. breezes were general, but in other parts of southern Europe the wind was very variable. The weather was fine in all the more southern countries, as well as in Finland and the south of Scandinavia, but cloudy in most other localities — fog prevailed on the southwest coasts of our Islands, and rain was falling at some of the Scotch stations, as well as in Poland and east Germany. Temperature had fallen a little in Italy and Algeria, as well as in western Germany, but risen elsewhere; readings ranged from 81° at Constantinople and 70° and upwards, over central Russia, the Mediterranean and the coasts of the Iberian Peninsula to 55° or less, in the west of Norway and the extreme north of Scotland. The highest individual readings were 81° at Constantinople, 77° at Cagliari, 75° at Barcelona, San-Fernando, La Calle, and Sfax, 73° at Algiers, and 72° at Kharkov, Palermo, Oran, and Tunis; the lowest were 52° at Bodö and Breslau, 54° at Christiansund and Munich, 55° at Skudesnaes, Sumburgh Head and Stornoway, 56° at Pembroke and Warsaw, and 57° at Munster, Prague and Cracow.

In the course of the day the barometer fell a little in the extreme west of our Islands, and the wind on the Irish coast backed to the southeastward. Temperature rose to a somewhat higher level than of late, the highest maxima registered over the United Kingdom being 76° at Loughborough, 75° at Oxford, 74° at Parsonstown, and 73° at Leith, York and in London.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER. —*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8 p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

DAILY WEATHER REPORT.

for WEDNESDAY 31ST JULY, 1889.

Issued by the Meteorological Office, 63 Victoria Street, London. R. H. SCOTT, Secretary.

	STATIONS.	† YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	8 A.M. TO DAY. Barometer. Reading at 32° F and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force. (0 to 12.)	Weather.	Sea. (0 to 9.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
SCANDINAVIA.	Haparanda ..	29.76	56	N	2	b	29.81	+.07	54	47	−10	N	4	bc	*	68	54	—
	Hernösand ...	29.84	62	NNW	4	b	29.76	−.04	57	49	−6	N	6	b	*	73	57	—
	Stockholm ...	29.71	61	NNW	6	o	29.85	+.20	59	52	−3	NNW	8	b	*	66	53	0.20
	Wisby	29.62	56	SW	8	r	29.79	+.20	54	51	−3	N	6	o	*	61	52	0.63
	Bodö	30.09	49	WNW	2	o	30.09	+.10	50	47	+1	WSW	2	c	1	54	47	—
	Christiansund...	30.12	53	NNE	6	bc	30.12	+.01	54	48	+2	ENE	4	b	2	55	45	—
	Skudesnaes ...	30.05	53	NW	8	b	30.10	+.05	54	51	0	NNW	4	o	3	59	48	—
	Christiania Fjord (Farder)	29.92	66	N	3	b	30.04	+.13	56	50	−3	N	4	b	2	66	53	—
	Skagen (The Scaw)	29.89	60	NW	3	b	29.99	+.11	60	54	−3	NE	3	b	2	70	59	—
	Fanö	30.02	55	NW	4	c	30.07	+.11	61	56	+3	NW	4	c	*	63	54	—
BRITISH ISLANDS.	Sumburgh Head	30.14	58	W	0	o	30.09	−.02	58	56	+1	SE	2	c	2	60	53	—
	Stornoway ..	30.06	62	SW	3	bc	29.95	−.12	63	62	+6	S	2	bc	2	64	51	—
	Wick	30.13	60	SE	2	o	30.07	−.06	58	56	−1	SE	4	m	4	65	54	—
	Nairn	30.05	65	E	1	b	30.01	−.09	61	55	+4	W	0	b	1	70	51	—
	Aberdeen... ...	30.14	59	SE	2	bc	30.11	−.04	57	56	−7	SSE	2	om	2	66	53	—
	Leith	30.11	65	SE	1	b	30.06	−.07	60	57	−5	SE	1	bc	*	73	53	—
	Shields	30.11	60	E	2	c	30.09	−.04	59	57	−6	SSW	3	c	2	68	56	—
	Spurn Head ...	30.12	60	ESE	3	c	30.12	−.01	62	59	+1	S	3	b	3	65	58	—
	York	30.11	72	E	1	b	30.13	−.02	60	59	−2	ESE	1	c	*	78	56	—
	Loughborough	30.09	79	E	1	c	30.12	−.04	66	62	+4	E	2	bcmr	*	82	56	—
	Ardrossan ...	30.05	67	S	1	c	29.99	−.13	66	62	+8	NE	1	bm	1	72	58	—
	Malin Head ...	29.96	68	SSE	5	bcm	29.87	−.18	65	61	+3	SSE	4	om	1	71	59	—
	Mullaghmore ...	29.93	72	ESE	6	c	29.87	−.18	65	59	0	SE	6	o	4	73	62	—
	Belmullet ...	29.90	72	S	4	bc	29.85	−.13	61	59	−2	SSW	4	o	*	75	60	—
	Donaghadee ...	30.06	60	S	2	bc	30.00	−.14	61	59	+4	S	3	b	1	63	54	—
	Barrow-in-Furness	?	68	NNE	1	bc	?	?	65	61	+10	SE	5	c	*	70	53	—
	Liverpool (Bidston)	30.05	75	ESE	1	bc	30.06	−.08	68	61	+8	SE	2	bc	3	78	60	—
	Holyhead ...	30.05	67	ESE	2	cm	29.99	−.14	69	63	+10	SSE	3	c	2	69	58	—
	Parsonstown ...	29.98	66	SE	2	o	29.93	−.13	65	61	+6	W	0	bc	*	71	58	—
	Valencia	29.86	63	ESE	6	rm	29.94	−.01	60	59	−1	SW	2	om	3	65	58	0.05
	Roche's Point...	29.96	61	SE	5	bc	29.94	−.12	61	58	+3	SW	3	c	4	62	57	—
	Pembroke ...	30.05	64	SE	3	bc	29.99	−.11	62	59	+4	SE	4	bcm	3	64	58	—
	Scilly	29.98	60	ESE	5	c	29.97	−.08	64	63	+6	WSW	1	b	2	64	57	—
	Prawle Point ...	30.08	61	ENE	4	b	30.04	−.11	64	61	+8	ENE	2	b	2	64	55	—
	Jersey	30.06	76	E	2	bm	30.06	−.08	68	63	+1	ESE	3	bm	3	77	63	—
	Hurst Castle ...	30.12	70	SSE	1	b	30.11	−.07	68	67	+5	ESE	3	bm	1	71	61	—
	Dungeness ...	30.14	65	SE	1	bc	30.14	0.0	65	61	+5	SE	1	bc	1	68	58	—
	London	30.12	71	S	3	bc	30.13	−.02	68	62	+4	SE	1	b	*	77	55	—
	Oxford	30.11	69	S	2	b	30.13	−.03	66	61	+3	S	2	b	*	80	56	—
	Cambridge ...	30.15	70	SE	1	b	30.15	0.0	66	62	+1	SE	1	b	*	80	53	—
	Yarmouth ...	30.16	63	SE	2	b	30.16	+.01	63	61	+3	SE	3	b	2	64	58	—
GERMANY.	Cuxhaven ...	30.07	57	NW	5	b	30.10	+.09	58	55	−1	NW	4	c	*	62	57	—
	Berlin	29.97	64	WNW	6	b	30.07	+.12	58	54	+1	WNW	5	o	*	72	52	—
	Wiesbaden ...	*	*	*	*	*	30.20	+.05	59	57	−2	W	0	c	*	66	50	—
	Munich	30.18	60	W	0	c	30.23	+.04	57	56	+2	NW	3	b	*	66	54	—
FRANCE & NETHERLANDS.	The Helder ...	30.17	61	NW	1	c	30.19	+.06	61	57	+1	N	1	c	2	64	?	—
	Brussels	*	*	*	*	*	30.20	+.03	61	57	0	E	1	b	*	70	52	—
	Cape Gris Nez...	?	67	W	0	b	?	?	64	60	+3	SE	1	b	0	72	57	—
	Paris	30.15	70	E	1	bc	30.16	−.03	62	58	+1	W	0	b	*	75	52	—
	Brest	30.02	72	SE	3	bc	?	?	64	62	+2	S	1	c	2	73	57	—
	Lorient	30.01	75	SE	2	b	29.99	−.09	65	61	+6	E	3	bc	2	79	59	—
	Rochefort ...	30.05	82	ESE	4	bc	30.02	−.10	68	64	+6	ESE	4	b	2	95	59	—
	Belfort														*			
	Lyons	30.10	73	NNE	1	b	30.15	−.01	63	59	+2	ESE	1	b	*	77	55	—
	Nice...	30.05	72	SW	1	b	30.12	+.08	67	62	−3	W	0	b	1	77	59	—
	Perpignan ...	30.07	73	ENE	2	b	30.10	−.02	65	64	−1	W	2	o	*	79	55	—
	Biarritz	29.93	87	E	4	b	30.02	+.03	69	65	+3	W	4	b	2	93	66	—
PENINSULA.	Corunna	*	*	*	*	*												
	Lisbon	30.01	68	WNW	2	bc	30.06	+.15	65	62	−5	NE	3	c	2	75	59	—

For Explanation of Columns, see p. 4.

‡ *Received too late for insertion in Charts on p. 2.*

WEATHER CHARTS

for 8 a.m. on WEDNESDAY. 31ST JULY 1889.

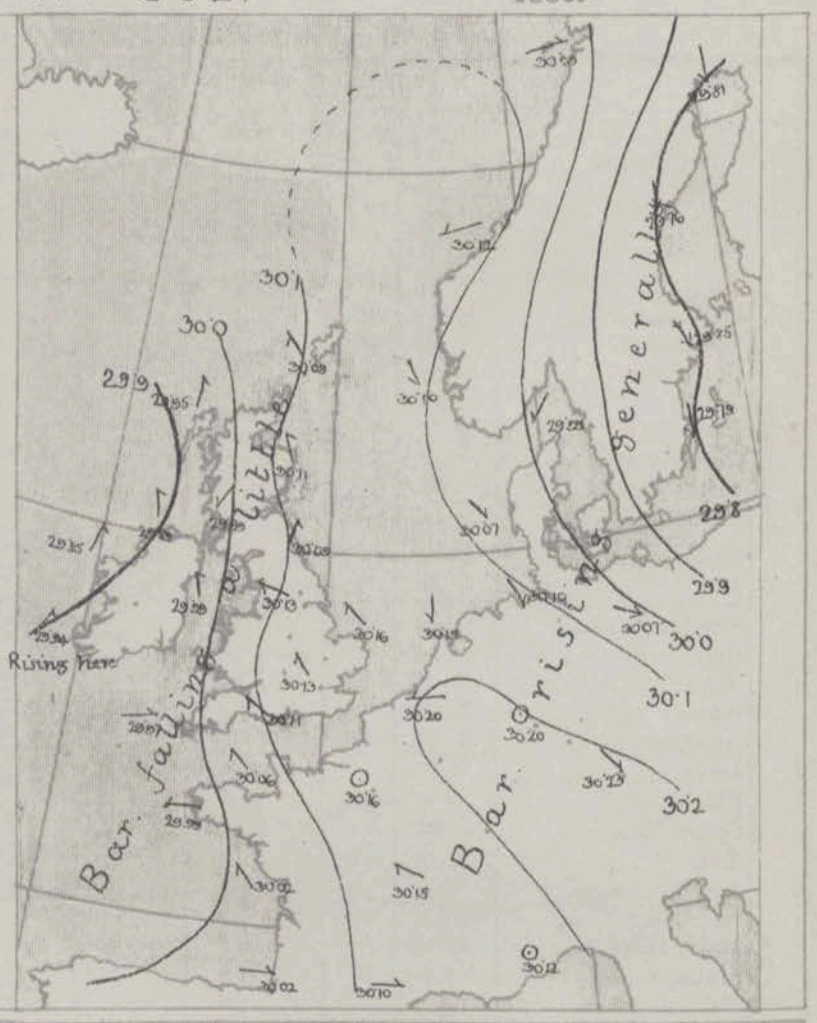
BAROMETER, WIND AND SEA.

EXPLANATION OF MAP.

BAROMETER—Isobars are drawn for each tenth of an inch. Changes since previous morning are stated in words.

WIND - Arrows shew the prevalent winds. They fly with the wind and their barbs and feathers refer to force thus—
= forces above 10; = forces 8 to 10;
= forces 5 to 7; = forces 1 to 4.
⊙ = dead calm.

SEA DISTURBANCE – Where considerable, is shewn thus:
= Rough. = High.



MEAN HEIGHT OF THE BAROMETER

at 8.0 a.m. for the month of July.
During the 15 Years: 1871—1885.

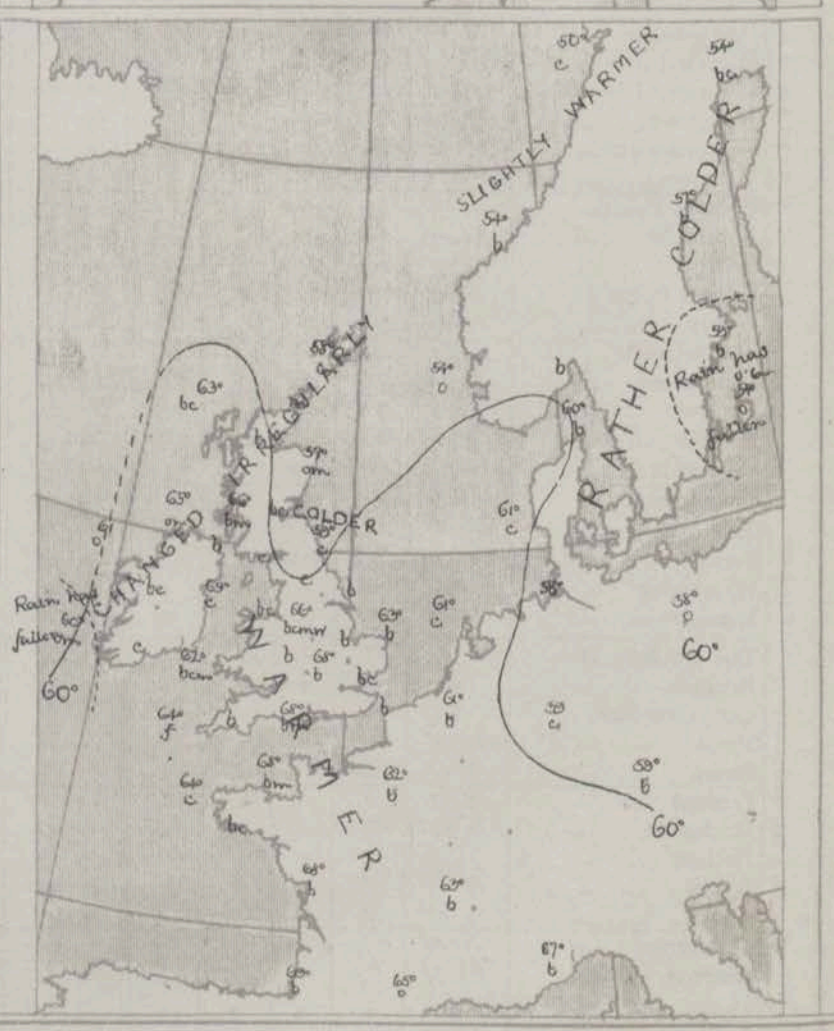
STATIONS.	MEAN READINGS.
	ins.
Sumburgh Head	29 · 794
Stornoway	29 · 797
Wick	29 · 810
Nairn	29 · 821
Aberdeen	29 · 831
Leith	29 · 850
Shields	29 · 876
York	29 · 910
Loughborough	29 · 936
Ardrossan	29 · 862
Donaghadee	29 · 881
Holyhead	29 · 918
Liverpool	29 · 913
Parsonstown	29 · 921
Valencia	29 · 939
Roche's Point	29 · 938
Pembroke	29 · 942
Scilly	29 · 984
Jersey	30 · 009
Hurst Castle	29 · 974
Dover	29 · 970
LONDON	29 · 967
Oxford	29 · 953
Cambridge	29 · 947
Yarmouth	29 · 943

TEMPERATURE, & WEATHER AT 8 A.M., WITH RAINFALL IN PAST 24 HOURS.

TEMPERATURE—Isotherms are drawn for each 10°. Changes since previous morning are stated in words.

WEATHER is shewn by Letters of the Beaufort Scale.

RAINFALL – A dotted line separates the district in which rain has fallen from those where there has been none. Falls of 0·5 in. or more, are quoted in figures.



MEANS OF TEMPERATURE IN SHADE, AND RAINFALL.

(For the month of July.)

STATIONS.	TEMPERATURE. Daily Max.	Daily Min.	at 8 a.m. Dry.	Wet.	RAINFALL. (*Inches.*)
Sumburgh Head	57 · 8	48 · 3	53 · 6	52 · 0	2 · 09
Stornoway	60 · 2	49 · 5	56 · 0	54 · 0	3 · 02
Wick	62 · 2	49 · 2	56 · 1	53 · 8	2 · 25
Nairn	64 · 7	51 · 4	57 · 2	53 · 6	2 · 57
Aberdeen	64 · 4	51 · 1	58 · 0	54 · 4	2 · 74
Leith	67 · 1	51 · 7	58 · 6	55 · 3	2 · 84
Shields	64 · 4	52 · 9	58 · 6	55 · 4	2 · 63
York	68 · 5	52 · 1	59 · 4	56 · 2	2 · 57
Loughborough	72 · 1	53 · 0	62 · 0	58 · 2	2 · 34
Ardrossan	63 · 9	53 · 2	57 · 5	54 · 8	2 · 91
Donaghadee	63 · 1	51 · 6	57 · 4	55 · 6	2 · 67
Holyhead	63 · 9	54 · 7	58 · 2	55 · 9	2 · 32
Liverpool	66 · 1	54 · 4	59 · 6	55 · 9	2 · 99
Parsonstown	66 · 4	51 · 9	58 · 3	54 · 8	3 · 01
Valencia	64 · 1	53 · 6	58 · 7	56 · 3	3 · 91
Roche's Point	66 · 7	53 · 3	58 · 7	55 · 8	3 · 16
Pembroke	62 · 9	55 · 0	58 · 1	55 · 9	2 · 31
Scilly	64 · 5	56 · 3	60 · 1	58 · 0	2 · 29
Jersey	68 · 8	56 · 3	62 · 2	59 · 2	2 · 21
Hurst Castle	67 · 0	55 · 7	61 · 3	58 · 8	2 · 15
Dover	67 · 2	56 · 9	62 · 6	58 · 8	1 · 82
LONDON	73 · 0	54 · 1	62 · 3	58 · 1	2 · 17
Oxford	69 · 9	53 · 7	60 · 2	56 · 8	2 · 51
Cambridge	72 · 3	52 · 4	61 · 4	57 · 9	2 · 30
Yarmouth	66 · 8	55 · 2	61 · 2	58 · 1	2 · 68

NOTE.—The Temperature means are for the 15 years 1871 85, the Rainfall means are mainly those for the 20 years 1866-85.

GENERAL SITUATION AT 8 A.M.

PRESSURE

Highest 30.10 ins. to 30.23 ins. in a high pressure area over the North Sea, eastern France and western & southern Germany
Lowest 29.8 ins. and less over the Baltic - 29.9 ins. and less off our extreme N.W.ⁿ coasts, & 30.0 ins. and less over the Bay of Biscay.
Gradient, slight and favourable for varying S.ly winds.
Barometer changing little and somewhat irregularly.

TEMPERATURE

Highest 69° at Biarritz; 68° at Rochefort Jersey, Hurst Castle and in London. 67° at Nice 66° at Oxford and Cambridge.
Lowest 50° at Bodo; 54° at Christiansund at Haparanda and Wisby 57° at Aberdeen, 58° at Cuxhaven, Wick & Lerwick Hd.
It rose to between 75° and 80° over our inland counties yesterday, and is now rising rapidly in those regions.

WIND

Moderate from between S.E. and S.W. over the United Kingdom generally.
N.ly and N.W.ly to the eastward of the North Sea (a gale at Stockholm)
Very variable over France, the Bay of Biscay, and west of Spain
The slight gale reported at Valencia yesterday afternoon has subsided.

WEATHER

Dull and unsettled at our extreme western stations, fair or fine generally elsewhere.
Rain fell yesterday at Valencia, and also on the Swedish coasts.

SEA

Moderate at some western stations, slight or smooth elsewhere.

PROBABLE CHANGES IN SYSTEM NOW PREVALENT

There is nothing to indicate any immediate change of weather.

FORECASTS

For the 24 hours ending at NOON on 1st AUGUST 1889.

DISTRICTS.	FORECASTS.	DISTRICTS.	FORECASTS
0 SCOTLAND NORTH 1 SCOTLAND EAST	S.ly breezes, moderate; dull to fair.	6 SCOTLAND WEST 7 ENGLAND N.W.	S.ly and S.W.ly breezes, moderate; fair.
2 ENGLAND N.E 3 ENGLAND EAST 4 MIDLAND COUNTIES 5 ENGLAND SOUTH	S.E.ly breezes, light to moderate; fine, warm.	8 ENGLAND S.W.	Variable airs; fair, fog at times.
		9 IRELAND NORTH 0 IRELAND SOUTH	S.ly breezes, followed by variable airs; fair as a whole.
		WARNINGS	NONE ISSUED.

Note.—The **South Cone**, *point downwards* (▼), means that gales, or strong winds, are probable at first from the Southward (from S.E. round by S. to N.W.). Should it appear likely that a gale beginning from between W. and N.W. is likely to veer towards N. or N.E., the *North* Cone is hoisted in preference to the *South* Cone.

The **North Cone**, *point upwards* (▲), means that gales, or strong winds, are probable, at first from the Northward (from N.W. round by N. to S.E.). Should it appear likely that a gale beginning from between E. and S.E. is likely to veer towards S. or S.W., the *South* Cone is hoisted in preference to the *North* Cone.

YESTERDAY'S 2 P.M. REPORTS.

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Skudesmues ...	30·04	57	52	NW 8	b	4
Sumburgh Head	30·14	58	57	X 0	o	1
Stornoway ...	30·09	61	61	SE 3	o	3
Aberdeen ...	30·16	65	61	SE 2	b	1
Shields	30·13	65	60	E 1	c	2
Ardrossan ...	30·10	71	64	SW 1	bc	0
Malin Head ...	30·00	69	61	SE 4	c	2
Mullaghmore ...	29·98	70	63	ESE 5	bc	3
Belmullet ...	30·09	74	65	SSW 3	bc	*

	Bar.	Dry.	Wet.	Wind.	Wea.	Sea.
Holyhead ...	30·10	66	61	NNE 2	bct	1
Valencia	29·91	65	61	SE 7	o	6
Scilly	30·01	60	60	ESE 5	f	4
Jersey	30·12	76	67	ESE 3	bm	3
Dungeness ...	30·14	67	63	SW 3	bc	2
London	30·14	74	65	SW 1	omg	*
Yarmouth ...	30·17	63	60	ESE 3	b	2
Rochefort ...	30·10	90	75	? ?	b	2

GENERAL REMARKS ON THE WEATHER OVER EUROPE

DURING THE PAST 24 HOURS.

The reports for yesterday morning showed that pressure was highest (30·1 ins. and more) in a large area of high pressure which covered the eastern parts of Spain, nearly the whole of France and Gt Britain, but that it decreased (1) in an easterly direction to between 29.4 ins. and 29.6 ins. in an irregularly formed depression lying over the Baltic Provinces and west of Russia, and (2) in a Westerly direction to 30·0 ins. and less, on the Atlantic coasts of our Islands and Spain. Thus strong N.W. winds were prevalent over the Baltic and Sweden, and NW.W. over Denmark and North Germany, while at the Russian stations the wind was extremely light and variable, though mainly SE.W. to S.W. Over Gt Britain and France variable airs prevailed, while in Ireland and over the Bay of Biscay the wind was SE.W. to E.W., and blew freshly on our extreme southwestern coasts. The weather was dull and unsettled over northern and eastern Europe, with rain in several places; at Breslau the fall amounted to about 1·8 ins. and at Riga to about 0·8 ins. Over western Europe the weather was fine in most places, cloudy and dull in the extreme west, and foggy on the coasts of Devon and Cornwall. Temperature had begun to increase over the United Kingdom, where the readings were rather above the average, but was very low for the time of year over Central Europe. The highest morning values were 80° at San Fernando and Barcelona, 77° at Brindisi, 76° at Cagliari, 75° at La Calle, 73° at Palermo, 72° at Leghorn and Trieste, 71° at Lesina, Constantinople and Odessa; 68° at Archangel and Nicholaieff, and upwards of 60° over Russia generally, and the greater part of England and Scotland. The lowest were 49° at Bodö, 52° at Christiansund, 53° at Breslau, 56° at Münster and Lemberg, 57° at Munich, Prague, Warsaw, Berlin, Donaghadee, Nairn, Stornoway and Sumburgh Head.

During the day the high pressure area moved eastwards; SE.W. breezes became general over the British Islands, temperature rose to between 75° and 80° over England, the weather became more unsettled at our western stations and rain fell at Valencia. Thunder was reported at Holyhead.

EXPLANATION OF COLUMNS GIVEN ON PAGE 1.

WEATHER.—*Beaufort Scale* is b. blue Sky; c. detached clouds; d. drizzling rain; f. fog; g. dark, gloomy; h. hail; l. lightning; m. misty (hazy); o. overcast; p. passing showers; q. squally; r. rain; s. snow; t. thunder; u. ugly, threatening; v. visibility, unusual transparency; w. dew.

* AN ASTERISK is inserted in all places for which information is not usually received.

† The evening observations are taken at 6 p.m. in France and our Islands with the exception of Oxford, where they are taken at 8. p.m. In Sweden and Denmark, the observations are taken at 8 p.m. (Christiania time).

The Subscription for these Reports, forwarded by book post, is £1 per annum, payable in advance.

ADDITIONS AND CORRECTIONS TO THE

1. REPORTS RECEIVED TOO LATE FOR INSERTION DAILY.

DATE.	STATIONS.	YESTERDAY EVENING.					8 A.M. TO-DAY.									PAST 24 HOURS.		
		Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direct.	Wind. Force (0 to 12.)	Weather.	Sea (0 to 8.)	Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
2	The Helder	30·30	59	NNE	2	0	30·28	+·01	59	-	-4	N	2	c	3	64	59	-
"	Corunna	*	*	*	*	*	30·06	-·22	71	67	+1	NE	2	b	3	73	61	-
4	Corunna	*	*	*	*	*	29·94	+·12	69	65	-7	NW	4	bc	0	88	57	-
6	Brussels	*	*	*	*	*	30·07	-·06	60	58	-2	WNW	2	bc	*	76	56	-
"	Corunna	*	*	*	*	*	29·90	-·23	66	63	-1	W	1	o	5	79	54	-
8	Bodö	29·52	58	ENE	2	b	29·52	-·06	60	53	+4	ENE	6	bc	3	70	50	-
"	Christiansund	29·34	63	NNE	2	bc	29·31	-·10	63	60	+7	NNE	3	b	3	66	55	-
"	Belfort	29·99	67	SW	1	b	30·00	-·04	66	57	+6	WSW	3	bc	*	71	55	-
"	Corunna	*	*	*	*	*	30·07	-·15	68	65	+2	NE	2	o	2	73	59	-
9	Corunna	*	*	*	*	*	29·88	-·19	66	64	-2	S	4	o	2	? 77	63	0·08
10	Corunna	*	*	*	*	*	29·88	·00	67	65	+1	SW	4	bc	4	76	61	0·16
11	Corunna	*	*	*	*	*	29·95	+·07	66	?	-1	WSW	1	r	2	73	61	0·08
12	Belfort	30·08	72	SE	1	b	? 30·04	-·06	67	56	+3	NW	1	b	*	80	64	-
"	Corunna	*	*	*	*	*	30·13	+·18	62	?	-4	NNW	2	c	1	66	57	?
13	Corunna	*	*	*	*	*	30·14	+·01	65	61	+3	WSW	2	o	2	68	54	?
16	Belfort	30·06	68	W	2	o	30·04	-	60	53	.	W	3	o	*	73	53	-
"	Nice	29·93	75	SE	4	b	30·04	+·12	69	?	-6	E	1	bc	o	81	59	-
"	Corunna	*	*	*	*	*	30·16	-	64	61	-	NE	2	bc	?	?	?	-
18	Corunna	*	*	*	*	*	29·96	-·15	66	60	+4	WSW	1	f	2	73	59	0·16
19	Corunna	*	*	*	*	*	29·95	-·01	71	68	+5	N	1	bc	2	73	61	-
20	Corunna	*	*	*	*	*	30·05	+·10	65	64	-6	NW	2	f	0	77	63	-
22	Brussels	*	*	*	*	*	29·86	+·08	59	53	-2	WSW	3	bc	*	70	56	0·04
"	Nice	29·95	73	SW	4	b	29·93	-·04	70	?	0	E	4	c	1	77	63	-
"	Corunna	*	*	*	*	*	30·12	+·01	64	63	+1	ENE	3	c	3	73	59	-
23	Corunna	*	*	*	*	*	30·14	+·02	61	59	-3	E	1	r	2	73	57	0·04
24	Berlin	29·86	64	SE	2	bc	29·80	-·14	61	57	+3	WNW	3	c	*	70	57	.
"	Wiesbaden	*	*	*	*	*	29·91	·00	58	55	-1	SW	3	c	*	70	50	0·04
"	Munich	29·98	57	SW	2	c	30·02	-·14	58	54	+2	SW	3	o	*	66	54	0·16
25	Belfort	30·07	59	W	2	bc	30·01	+·01	57	52	0	W	2	o	*	69	53	0·08
"	Nice	29·81	75	SE	1	bc	30·01	+·19	70	?	-1	E	1	b	1	86	61	.
"	Corunna	*	*	*	*	*	30·14	-·08	65	62	-1	S	3	o	4	75	52	-
26	The Helder	29·47	59	WSW	3	r	29·43	-·13	59	?	0	WNW	2	c	3	63	55	0·16
"	Brussels	*	*	*	*	*	29·58	-·14	58	?	0	WSW	3	c	*	66	55	0·20
"	Corunna	*	*	*	*	*	30·07	-·07	66	61	+1	NW	4	o	5	73	59	-
27	Corunna	*	*	*	*	*	30·29	+·22	69	64	+3	NE	2	c	5	73	57	-
29	Brussels	*	*	*	*	*	30·08	+·08	60	?	+2	WSW	2	o	*	?	57	.
30	Belfort	30·12	60	WNW	1	b	30·14	+·01	55	48	-1	SE	1	b	*	65	50	0·08
31	Belfort	30·13	63	SE	1	b	30·15	+·01	55	50	0	SE	1	b	*	69	?	.
"	Corunna	*	*	*	*	*	30·10	-·19	71	66	-1	WNW	1	bc	0	77	59	-

REPORTS FOR JULY 1889.

2. CORRECTIONS.

DATE.	STATIONS.	YESTERDAY EVENING. Barometer at 32° F. and Sea Level.	Temp. in Shade.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	8 A.M. TO-DAY. Barometer. Reading at 32° F. and Sea Level.	Barometer. Difference from 8 a.m. yesterday.	Shade Temp. Dry.	Shade Temp. Wet.	Shade Temp. Difference from 8 a.m. yesterday.	Wind. Direc.	Wind. Force (0 to 12.)	Weather.	Sea (0 to 8.)	PAST 24 HOURS. Shade Temp. Max.	Shade Temp. Min.	Amount of Rainfall.
2	Malin Head...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·02
3	Dungeness.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66	-	-
10	Sumburgh Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·01
-	Nairn.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·02
12	Nairn.....	29.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Stornoway.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	-
-	York.....	-	-	-	-	-	30·03	-·02	-	-	-	-	-	-	-	-	-	-
15	Nairn.....	-	-	-	-	-	29·65	-·15	-	-	-	-	-	-	-	-	-	-
16	Scilly.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·02
-	Dungeness.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·66
17	Holyhead.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·01
-	Hurst Castle....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·44
18	Scilly.....	-	-	-	-	-	-	-	?58	?56	-2	-	-	-	-	-	54	-
19	Aberdeen 2pm	-	-	-	-	-	-	-	56	-	-	-	-	-	-	-	-	-
20	Belmullet.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53	-
"	Aberdeen 2pm	-	-	-	-	-	29.68	-	-	-	-	-	-	-	-	-	-	-
21	Ardrossan.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·02
22	Aberdeen.....	-	-	-	-	-	-	-	-	51	-	3	-	-	-	-	-	-
-	Yarmouth....	-	-	-	-	-	-	-	64	62	+3	-	-	-	-	-	-	-
23	Hurst Castle..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65	-	-
-	Yarmouth.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56	-
24	Belmullet....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59	-	-
26	Stornoway....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0·02
27	Dungeness....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No rain
28	Barrow-in-Furness	?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	Barrow-in-Furness	?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-